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tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg   180
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ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg   600
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tctcctcatc attgccttt ttgtggttgt aaatagactt acttgcactt tgaagatgag          540
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tccacgtcat  ttgccttcta  tcccagctat  gtttccagtg  tcctctgggt  gtttccaaga    180
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tgctgctaaa  acacagcttc  catcgtaatg  tatgctcctt  actcaaagag  tgtggtccca    720
aacagccttt  gggaggtcct  ccttgattca  tggatgaaac  ctggaacatc  ttgaggactg    780
agttaaccat  aggtccttaa  ataactctcc  acacgttttt  cttagtttat  ctctacatgc    840
agggtgtgca  gcagcctgtt  caaagtcata  ttttctggga  aatatttcca  gtgtttattt    900
gcactttagc  ccactctgtg  tagccttatt  tcttctaaac  tcaccattaa  tctgaataat    960
agtcaaattt  aggggggactg  tatttgcctt  a                                    991
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<210> 22
<211> 653
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<212> DNA
<213> Homo sapiens

<400> 22
ccacgcgtcc ggaattcccc tgaggatctt gggctatctt tgacaggga ttcttgcaag   60
ttgatgcttt ctacaagtga atatagtcag tccccaaaga tggagagctt gagttctcac   120
agaattgatg aagatggaga aaacacacag attgaggata cggaacccat gtctccagtt   180
ctcaattcta aatttgttcc tgctgaaaat gatagtatcc tgatgaatcc agcacaggat   240
ggtgaagtac aactgagtca gaatgatgac aaaacaaagg gagatgatac agacaccagg   300
gatgacatta gtattttagc cactggttgc aagggcagag aagaaacggt agcagaagaa   360
gtttgtattg atctcacttg tgattcgggg agtcaggcag ttccgtcacc agctactcga   420
tctgaggcac tttctagtgt gttagatcag gaggaagcta tggaaattaa agaacaccat   480
ccagaggagg ggtcttcagg gtctgaggtg gaagaaatcc ctgagacacc ttgtgtaaagt   540
caaggagagg aactcaaaga agaaaatatg gagagtgttc cgttgcacct ttctctgact   600
gaaactcagt cccaagggt gtgtcttcgg aggcatccaa aaaaaaaaaa aaa   653

<210> 23
<211> 1486
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (589)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (602)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1484)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1485)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1486)
<223> n equals a,t,g, or c

<400> 23
ggcaggctga cgacctgcaa gccacagtgg ctgccctgtg cgtgctgcga ggtgggggac   60
cctgggcagg aagctggctg agcccccaaga ccccgggggc catgggcggg gatctggtgc   120
ttggcctggg ggccttgaga cgccgaaagc gcttgctgga gcaggagaag tctctgccg   180
gctgggcact ggtgctggca sgarctggca ttggactcat ggtgctgcat gcagagatgc   240
tgtggttcgg ggggtgctcg gctgtcaatg ccactgggca cctttcagac acactttggc   300
tgatccccat cacattcctg accatcggct atggtgacgt ggtgccgggc accatgtggg   360
gcaagatcgt ytgcctgtgc actggagtca tgggtgtctg ctgcacagcc ctgctggtgg   420
ccgtggtggc ccggaagctg gagtttaaca aggcagagaa gcacgtgcac aacttcatga   480
tggatatcca gtataccaaa gagatgcaag agtccgctgc ccgagtgcta caagaagcct   540
ggatgttcta caaacatact cgcaggaagg agtctcatgc tgcccgcang catcagcgca   600

```
anctgctggc cgccatcaac gcgttccgcc aggtgcggct gaaacaccgg aagctccggg      660
aacaagtgaa ctccatggtg gacatctcca agatgcgcat gatcctgtat gacctgcagc      720
agaatcgag cagctcacac cgggccctgg agaaacagat tgacacgctg gcggggaagc      780
tggatgccct gactgagctg cttagcactg ccctgggggc gaggcagctt ccagaaccca      840
gccagcagtc caagtagctg gacccacgag gaggaaccag gctactttcc ccagtactga      900
ggtggtggac atcgtctctg ccactcctga cccagccctg aacaaagcac ctcaagtgca      960
aggaccaaag ggggccctgg cttggagtgg gttggcttgc tgatggctgc tggagggggac     1020
gctggctaaa gtgggkaggc cttggcccac ctgaggcccc aggtgggaac atggtcaccc     1080
ccactctgca taccctcatc aaaaacactc tcactatgct gctatggacg acctccagct     1140
ctcagttaca agtgcaggcg actggaggca ggactcctgg gtccctggga aagagggtac     1200
tagggcccg gatccaggat tctgggaggc ttcagttacc gctggccgag ctgaagaact     1260
gggtatgagg ctggggcggg gctggaggtg gcgcccccctg gtgggacaac aaagaggaca     1320
ccattttttcc agagctgcag agagcacctg gtggggagga agaagtgtaa ctcaccagcc     1380
tctgctctta tctttgtaat aaatgttaaa gccagaaaaa aataaaaaaa aaaaaaaaa      1440
aactcgaggg gggcccrkac ccaatcwccc tatagtakac gtannn                   1486


<210> 24
<211> 2323
<212> DNA
<213> Homo sapiens

<400> 24
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ccttcagctt ctccctccgg atcgatgtgc tgccgccgcc gccgccgccg tccgcgtcc      120
ttcggtctct gctccgggga cccggctccg cgcagccagc cagcatgtcg gggatcaaga     180
agcaaaagac ggagaaccag cagaaatcca ccaatgtagt ctatcaggcc caccatgtga     240
gcaggaataa gagagggcaa gtggttggaa caagggtgg gttccgagga tgtaccgtgt     300
ggctaacagg tctctctggt gctgggaaaa acaacgataa gttttgccct gggaggagtac     360
ttgtctccca tgccatccct gttaattcct ggatggggac aatgtccgtc atggcctaa     420
cagaatcccc cagatggctt catggcccc aaagcatgga aggtcctgac agattattac     480
aggtccctgc agaagaacta agccttttggt ccagagttttc tttctgaagt gctcttttgat     540
taccttttct attttttatga ttagatgctt tgtattaaat tgcttctcaa tgatgcattt     600
taatcttta taatgaagta aaagttgctt ctataattaa aaaaatatat atatatatac     660
acacacacat atacatacaa agtcaaactg aagaccaaat cttagcaggt aaaagcaata     720
ttcttataca tttcataata aaattagctc tatgtatttt ctactgcacc tgagcaggca     780
ggtcccagat ttcttaaggc tttgtttgac catgtgtcta gttacttgct gaaaagtgaa     840
tatatttttcc agcatgtctt gacaacctgt actcttccaa tgtcatttat cagttgtaaa     900
atatatcaga tgtgtcctct tctgtacaat tgacaaaaaa aaaaattttt tttttctcact     960
ctaaaagagg tgtggctcac atcaagattc ttcctgatat tttacttcat gctgtacaaa     1020
gccttaatgt tgtaatcata tcttacgtgt tgaagacctg actggagaaa caaaatgtgc     1080
aataacgtga atttttatctt agagatctgt gcagcctatt tctgtcacaa aagttatatt     1140
gtctaataag agagtcttta atggcctctg tgaataatgt aactccagtt acacggtgac     1200
ttttaatagc atacagtgat ttgatgaaag gacgtcaaac aatgtggcga tgtcgtggaa     1260
agttatcttt ccgctcttt gctgtggtca ttgtgtcttg cagaaaggat ggccctgatg     1320
cagcagcagc gccagctgta ataaaaaata attcacacta tcagactagc aaggcactag     1380
aactggaaaa gaccacagaa aacaaagaat ccaaccttt catcttacag gtgaacaaac     1440
tgtgatgatg cacatgtatg tgttttgtaa gctgtgagca ccgtaacaaa agtaaatttt     1500
gccattatta ggaagtgctg gtggcagtga agaagcaccc aggccacttg actccagtc     1560
tggtgccctg tctacaccag acaacacagg agctgggtca gattccctcc agctgcttaa     1620
caaagttcct cgaacagaaa gtgcttacaa agctgccttc tcggatactg aaaggtcgag     1680
ttttctgaac tgcactgatt ttattgcagt tgaaaaaaaa aaaaagctat tccaaagatt     1740
tcaagctgtt ctgagacatc ttctgatggc tttacttcct gagaggcaat gtttttactt     1800
tatgcataat tcattgttgc caaggaataa agtgaagaaa cagcaccttt taatatatag     1860
gtctctctgg aagagaccta aattagaaag agaaaactgt gacaattttc atattctcat     1920
tcttaaaaaa tcacttcatt aactaacaaa agttcttttg agaataagtt acacacaatg     1980
gccacagcag tttgtcttta atagtatagt gcctatactc atgtaatcgg ttactcacta     2040
ctgcctttaa aaaaaaaaac cagcatattt attgaaaaca tgacacagga ttatagtgcc     2100
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```
ttaaccgata tattttgtga cttaaaaaat acatttaaaa ctgctcttct gctctagtac      2160
catgcttagt gcaaatgatt atttctatgt acaactgatg cttgttctta ttttaataaa      2220
tttatcagag tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      2280
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa                        2323
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<210> 25
<211> 683
<212> DNA
<213> Homo sapiens

<400> 25

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ggcacgagcc tgtgtggtca tgttcctcgt ggtgcagtac ctgacatgag ccagccacgc        60
tcagtggctg aacagcattc ccacagcctg caagtgtgtg tgtgtgtgaa agagagaggg       120
gggcccagag ccgccttttg aaatgttttgc ctgtctgaac tgtgaagaca cttgggagtg      180
attgtggtct aatttccaac ctgctctgtt ttctgtgaca tcttggaggg gagctagtgc       240
cacaccatgc gcggtgctta gaaatgaaaa agtcccgggt ctgtctctct cactctcgct       300
ctcatggggg agggaaagaa tggctttggt ggctttgttc acacagctga tgcgtgctgg       360
gaaggtgtcc acagtgagcc tgtgtgcagg actgtccaca cggttcacac ttgtcaccat       420
caggcctttc tggtcctgat agggtggagc aaaagtggaa aggaaaggaa agaggctttt       480
ctcacagcca ttatattaaa tagtaggtcg attcacatct cgtgctcctg gccaccttcc       540
cctgtgcctc agtgacatgt agatgactga ctgccaatac ttgtcaccat tccctggaag       600
cagctaccta ggggaaacaa gatgtgtagtc tattgccgat aacaagtaag attttccaca      660
ctaaaaaaa aaaaaaaaa aaa                                                 683
```

<210> 26
<211> 2036
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1599)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2028)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2032)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2033)
<223> n equals a,t,g, or c

<400> 26

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ctgagaaagg aaagcattcg gatctgctgc aaaaacacat atatccataa agactcatgt        60
tattcagaaa acagttgtg aacacaatca cattcgcatg aatcctttaa aaggaagaag       120
accttaaagt atctgcaaat ctgaatttct atttattcct tcactgaata tagaaacaat      180
ggttatctga ttattagaga tattattttg gatatgttac ttattaactt gctatggctg      240
gtaaccatga taaagtctgt tattaataac aacataattc ttttttttaaa gaagaaaagc      300
ttatttttca ttgacagtgt atagatttat ctacttagtt gtgtttttgct attagtgttt      360
```

```
taattttttt tttaagttga gtgtttgata aattttaaga ccctgtcccc accttgtttt      420
gagtcctgtg ttgactacag gtatatagcy cawtttaaaa atcctaaagc aaaagaattt      480
tatttataaa agaatcmamc mgttgcatgc atgaggctgt gaagtcagat atttagtaat      540
aaaagcagca gtgccttttt ttgtatttac ccattgaccc ccaccaaatg caactgtttt      600
atattaagaa aatagtaaca attttaaaat ctcagagtaa aatctatttc actacatgct      660
tttcccccct tgttctgatt taagcagtgt gtacttggca tctctacatt gtcctaggga      720
cagtggtgtt ctacaatatt atcatgtatg atgttttatt ggtgcttttt attcatagtg      780
gcttcttacc agaaacagta ggaagaaaca catgaactgt gtacaagaca tgaaacattg      840
ctgctgatat gttgtttttt cacatgcttt tgagttttca ctttttaaac gagagccagc      900
aagcaaaata gatgtggctg ggtctgcctg tccgggcggc tytttgcacc gagctctcaa      960
atcctgtgta ttgaggggtc cttttttggta ctcaggattg gagctacagc tgggcccccc     1020
tctctcccat tcgtttgaag agacactgag ggaaacaagg gtttcttttg aggtgtcctt     1080
ggctgccttt tacgggatgg gagccttctc cggatctttt gttcttctgc acctcttgta     1140
gctactgccg gtgcaaggtt gtagatgtta ttccccagga gcctgggctk gggggctgag     1200
ctgggctgaa tgcaaaagca tgcaaccaga aggcgggcaa ggggaggaaa agcaggcctg     1260
gcctcattgg tccccctggag atgtctgtag cagtcagctc cagcttgggc ctggggaagc     1320
agcctgacca aggcgctcag gtgtgcctgt tacaagaaga acctgcagaa ggataatttg     1380
cacatggagc tgtgtgataaca ctaatgttga ttttttttttt ttttacaagt catcagrgat     1440
gtttgcaaag tgagtttttat tttttttgtaa ttccttttatc tttacttaaa ggtgaatgtg     1500
tattcctctg ggaggaatag gaagaaaaca ggaatgttaa taatgtcgaa cagaaaactt     1560
cctcccttat taatatataa tcytcatgta tttatgccnt aatgtaagct gacttttaaa     1620
aagctttctt ttgttgcatg ccctgtgcag gcatctgtat tgtacatgca tgcctttcgt     1680
cctgtttttcc tgtataaagt tagtgaacaa agaaatattt ttgccctagt tcatgttgcc     1740
aagcaatgca tattttttaa atttgtcata tatggaaaga gcatgtttgt tacatgtaaa     1800
agctttactg atatacagat atactaatgt ttgaagatgc tgttcttttgc aagtgtacag     1860
ttttcaaatg ttgttaccag tgaaacaccc ttgtggttta aacttgctac aatgtattta     1920
ttattcattt cctcccatgt aactaagaat catggctata tttcatatca acgttatatt     1980
gaaagtgaag ggaaatgatt aatacaaggt tttgtaacaa aaaaaaanaa annaaa        2036


<210> 27
<211> 717
<212> DNA
<213> Homo sapiens

<400> 27
ggcacgagat aacataggca caataatact gtatgtctac ttctaggatt ataaggaatt      60
aacattgaga tgacatttcc atttgagaag aaaatagttg ctttcagtgc cttttatttg     120
attcctggag agagcagact agcaccaaca ttcaaccca gcgctgatat gacagtaatc     180
ctcagaggca gagcccagca caaaacagca atgctagaaa gttacaattg gaaagtttcc     240
tgccagcttc gggaatgaca ctgcaaagct gatgccagaa actgccagag taattctcct     300
cattactgct ctacccaccc actttcagct cccaaaatta actagtgcag ttgactaatc     360
ctctttacct ttatcattta ggtgaggcat tgcacaaaaa ctctcgactt tgccatataa     420
gggctgtggt tctctgtggt cctggataag aggcatcacc attatctgga aacatgcagt     480
aaatgcagat tcttcatctt ctcccccagac ctcctgagtt agaaattcac aagttctcca     540
ggtgatctca tacatgctaa agtttgagaa ccattgagta aagttaatgc attaagaaga     600
gattagatag ggatggtggc gtatcttcct acagtttccc tgttaacaag aaagtcagag     660
gtcagttgat cagacattag attatttatt gctaaaacta aaaaaaatta aaaaaaa        717


<210> 28
<211> 495
<212> DNA
<213> Homo sapiens

<400> 28
gaattcggca cgagcagcat cctaatttta gtttggagat gcattctaaa ggatcttctc      60
tattgctttt tctcccacaa ttaatcttga ttctgcctgt ctgtgcacat ttgcatgagg     120
```

```
aactgaactg ttgttttcat aggtaaatga gagactgagt tttttcattt ctgaagagaa      180
agggcatttg ctcctacaag ctgaaaggca cccctgggtg gctggggccc tcgtgggagt      240
ttctggggag ttgacccttta caacatgcag tggccctaca gaaaaacctg caactaaaaa      300
ttatttttta aaaaggctcc tccaggaaat gcatataagg gctaatcacc cagtattttg      360
argcttcgaa gargtaatar amccctggag agagaaactg agacatgtaa gagggtggga      420
atgactcagt ggtggcacac tatggagtcc tgcccacaag tagcacacat caacccacta      480
cacagaaatc ctagg                                                       495
```

```
<210> 29
<211> 556
<212> DNA
<213> Homo sapiens

<400> 29
agcttaacgt catggattcat taggggaatg caaggcaaaa ccatgatgag aatgcccta      60
gacacctctt agaagagctg ctagaaaggc agacagcacc aagcgcttaa atgagatggg      120
ggcactggtg cttcttctgt gcctactggt aggggtgcag cagagtggtt cagtctggga      180
cagttagctg gacatcacgt ggacccaaca cacgcatttc ctgggttact taccaaggag      240
aatagaaagc aggcagatcc ttacagcagc tcttacctgw ttgcaaaaca atggaaatgc      300
ccacatgtcc acaaacaagt ktgtggtctg cctgtgccat gaagcacagt gtggctgagc      360
gtcaagagtc cccacactca aaggaggcag cagatacagg gctgcacact gtgtgattcc      420
acacatgtga cattctggac acggacatgc tggatggcaa aacgagcatc gggctgagag      480
gactgctgag aagggggaacg gggctgctgg gatgtgggtt gattgtagca gtagctcatg      540
gagatgtgac ctcaaa                                                      556
```

```
<210> 30
<211> 434
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (347)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (363)
<223> n equals a,t,g, or c

<400> 30
ctaaatggtg actgtggctt tgtcgagaca ggccccaaat ggtaggtgtg aacacaacat      60
gcacagaatg aggagacatg cagagtgctg aaatactgtc ctggacagat gtgttacatg      120
acttctttt cagcttattt ctgtggcctg cctttgaaga tagagctttg ttgatattta      180
cattaaacca aattgtataa ytatgttcca ttctgacatg ttatttagca aargaaaaar      240
gagtaattct acatcagcat ctttagtgca tgctaaaaga ttaaaaatgt cttttgggga      300
acatgttttg tatacataaa tgtttagata gaaatatttta tagaatnctc tatgtgagta      360
ttnatctccc tatgtatatt tatatctaga tgtgtcaatc tttgtattga tatgaaatgc      420
tatgaatagt gaga                                                        434
```

```
<210> 31
<211> 715
<212> DNA
<213> Homo sapiens
```

```
<400> 31
ccacgcgtcc gatctcacag ctccgacact attgcgagcc atacacaacc tggtgtcagg      60
aaacgtactc ccaaactaag cccaagatgc aaagtttggt tcaatggggg ttagacagct     120
atgactatct ccaaaatgca cctcctggat tttttccgag acttggtgtt attggttttg     180
ctggccttat tggactcctt ttggctagag gttcaaaaat aaagaagcta gtgtatccgc     240
ctggtttcat gggattagct gcctccctct attatccaca acaagccatc gtgtttgccc     300
aggtcagtgg ggagagatta tatgactggg gtttacgagg atatatagtc atagaagatt     360
tgtggaagga gaactttcaa aagccaggaa atgtgaagaa ttcacctgga actaagtaga     420
aaactccatg ctctgccatc ttaatcagtt acaggtaaac attggaactc catagaataa     480
atcagtattt ctacagaaaa atggcataga agtcagtatt gaatgtatta aattggcttt     540
cttcttcagg aaaaactaga ccagacctct gttatcttct gtgaaatcat cctacaagca     600
aactaacctg gaatcccttc acctagagat aatgtacaag ccttagaact cctcattctc     660
atgttgctat ttatgtacct aattaaaacc caagttaaaa aaaaaaaaaa aaaaa          715
```

```
<210> 32
<211> 486
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (374)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (422)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (442)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (474)
<223> n equals a,t,g, or c
```

```
<400> 32
gagccagtgc cggcgaaagg ggaccttcct ctacttcctg ccacagaccc tgtccccaca      60
cacttcctgc ccctgctctg ctgggaggcc acttcctccc ccagtgctgg attccacccc     120
cagctcaccc tcaaacatgg cccctctct cctcctgctt gccctctct gctccctgga      180
ggctgttctg tcctcccctc ttgaaaagca atgccagctt cctgggatct tctgccaact     240
ccagctacca tgccctttgc tcctgtcagc tcagctcctc aagggaattg tctamcctcg     300
gtgtcctgct tccctccctc aacctcctca ccctgctcca agctggcatc tgcccctcca     360
ctgcacagaa cggntccccc accacctgcc tttacaggga ggaagcagca acatggaaga     420
ancgaactat aggggctaca angatgctca gctctgatcc cgaaggcaaa aagnatcttt     480
gggcac                                                                486
```

```
<210> 33
<211> 725
<212> DNA
<213> Homo sapiens

<400> 33
```

```
gttcctctgg taataattag gttattccca gaagcacagt gtcattcttt aaataaaagc    60
tttcctgttt aaagctttc  aaaggagcag accaccttga agattccccc tagggttgat   120
atgtgtctaa ttcattttat aaaaattatt cttgtcttca ttttaaagct ttggctatat   180
agtcagaaat gtcctaaata acaaactatt ttgtatttaa tttagggaag actaaaggga   240
agaaaaatga aaactcagtc tttatgtaag ctccaaggat attagggctt aaagggcttt   300
tctagtttta tgagaatttg tactactgat ttttatatat tcctgttttt gatgaacaga   360
tctctgggga aattgttgag ttacaatggc atttcactgt gatccctctc aagctcagat   420
cagttctata acccaatgac aacctgtctc tttggtttac tgtcctgtga aatgtcagct   480
caagtttccc agaagtcgtg tgtttatgat gagtcagagt gctttttcctc ggtgggacag   540
ttgctggccc tcttaatttt ggtgtatgtg cttccaagta tctaaacctc cagtctgatc   600
tgtatatgct atcctaactg ttaattgtat tattgattat gttgattatc ttgcttgaag   660
gttcatactt ttcaatttga tagaaataaa gtttttttct gcttataaaa aaaaaaaaaa   720
aaaaa                                                               725
```


<220>
<221> SITE
<222> (410)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (415)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (436)
<223> n equals a,t,g, or c

<400> 34
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cacacagcat gctgccctca gacgtgtcca tcctgtacca catgaaaacg ctgctgctcc    60
tgcaagatac tgagagattg aagcatgctc tggaaatgtt cccagaacat tgcacgatgc   120
ctcctgcttt tattggctct tgtcgaaatc aaattggaag atcttcagtc ccagctgcac   180
ccaacgtgga aaagtattcc aggtccatcc ccaaggaacc aacaccgatg acatgggactc   240
aggaatctta taacctacgt ggactctttc catccgtaca ttgtcgtgca catgccactc   300
atcacctggc gtgcccagat cctcgcargg caacaccctg tgataattcc aggtgattct   360
ctacatctgc agcttgaggt tagcctcata tcacattaca ttctcactan aaacnaaaaa   420
aaaaaaaaa aactcna                                                   437
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<210> 35
<211> 943
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (324)
<223> n equals a,t,g, or c

<220>
<221> SITE

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<222> (333)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (347)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (354)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (563)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (584)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (606)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (628)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (630)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (637)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (640)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (652)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (655)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (673)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (692)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (708)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (713)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (721)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (728)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (735)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (739)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (769)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (775)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (799)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (804)
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (812)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (826)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (838)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (846)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (884)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (900)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (901)
<223> n equals a,t,g, or c

<400> 35
ggcacgagct ggaacagaga ctaaatccca cgaaactgac attgttaaac acactaaaac      60
agaagtactt acctcttgaa gatttaatat ataatggttg acatgataca tgtacatgat     120
gaatgaccag atgcttatgg tctacatttt cctttatcct gttagtatta ccttccttaa     180
tctttgttca ttaacatgct aattcctctt cagtgtttat tttctagtga cagaatgcta     240
acatttctta caccctggca gaagggagag aaatgtgttt tggggtgggt aactaaattt     300
ttgagtgaaa tatcataaga tganaatgga aanaaggaga cacaaaagt tatnacaaaa      360
aaacaatggt tttttagcc atttgactgg ctctttaaat agtctacaag acattcacgt      420
ttaacatcac ttttagtgaa ataaaatgtg ccatactagt atgtgcttca aaagggcaaa     480
tgtgctttag tgccctaagg ctaaattttg gtcatttgac atcagagatg ttgtaagtat     540
tgcacttaat acgcacctat ttntcaatag tgttattttt tggntagcat tttttttacc     600
actatnttgt tgatagcttt ttgttctntn aggttgnaan atgacagtgc tnatntcaaa     660
cagattaccc atntgcagaa ctaagggaag cnattatgt atgaaagnaa ttnttgaatt      720
ngtcattntc aaccnttgna ttaaagctta gactaaatag taatatatng tgggnaggat     780
ttttggtttg tgatatttnt gtgnattaag gnatagatgt taaccnttat tttgtagnaa     840
agtganttgt atgtggttaa ttataaataa aactggtacc aggnaaaaaa aaaaaaaaan     900
naaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa                       943


<210> 36
<211> 604
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<212> DNA
<213> Homo sapiens

<400> 36
ggcacgagaa atcttcatgc tgtagtcact ccagaccatg gagtggcttt ccagctgaat          60
gaatcctatg tctcgcgtgc aggtggttgg ttttcaaagt tcttgctaat ttttttttcta         120
ttggatcttg ggagtttttct ttgtttgctc ctgtgtttgc ccagctttaa taaaaccagg        180
cgcaaacaaa aaccatagca ttctgaacaa taggggggcc acattggacc cagtatgtca         240
ctttaatgga cttcaagaaa aaatctgaat gggaaaaatg acactaggaa tgtatactcc         300
acacattta  tgccatataa tggtgtgttt tcttaatttt gtttcttgtg gcgaaatgtg         360
gctttcaaat taaaatgacc ttttcttctt tgaaactttt tgtttttgact tgtataatta        420
aggggtttgga aagattcata attctgagag aggtttgcaa ccaggagata caaagaagtc        480
tcagtagtaa tcttgttcat gtgcttttac agccagctac atttaaggat gtattagtta        540
cagaaattat atgtctgtgt atgtgtctct actcaataaa gtacatgcct ccacaaaaaa        600
aaaa                                                                       604


<210> 37
<211> 349
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (328)
<223> n equals a,t,g, or c

<400> 37
gtgagtgccc gggagccccg aggccctgcc cctaagaagg atatctytra ccgctcccctt         60
gtccacaccc taaccccca gctgctcagg cagtgggcac atggcagggg cctcactggg          120
ggcacataga gcatttgggg gactgcgagt gctcacctttt gacttcctgc aggtcgggggg       180
aaaaccagat catgatggcc aaagtytaca tattcttgat cttcatggtg ctgatcctgc        240
cctccctggg tctcaccagg tatatgccac cacyttctgy tctaaattca gaataagagt        300
cacatcagga gagcactgtc cccaggganaa tgcaaacggg ttggcagca                    349


<210> 38
<211> 672
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (353)
<223> n equals a,t,g, or c

<400> 38
gtagtcgttg cggttgccgg gatggcgaag atctcgccgt ttgaagtcgt aaaacgcacc         60
tcggtaccgg tgctgttggg tttggtgatt gtwatcgttg ctacagagct gatggtgcca        120
ggaacggcag cagcggtcac aggcaagtaa atagtaatgc cggagcaagt ttcctccggc        180
tttatcatgt cacccactgt ggtatatgcg ttgtggtctg ccaactttgc cgtgaacaat        240
ttcagcaata atcagatggc ggctggcgca atattcaaga taacgcctgg cagtggtgcg        300
gctgatggt  cagtgcctgc gscaccgttt ytgccgtatg ttgcacacca ggntctttaa        360
acagttttcg aacgcgttt  agcgtcaagg gttcaatgcc ggtcggtagc tcgtccttag        420
gttcaccgcg agcataagca ttaaacatct catcaatttg cttctggctg cgcgtatcaa        480
tactttccag catatgttta cgctggcgga aacgggttag cgtttgcccc arcmgwtcat        540
aggcaatggg cttaatgaga taatcaaata caccacaacg tacggcttca gacaccgttt        600
ccatatcgct ggctgcagtg gtaaacacca cgtcgccggg ataatgcgcc tgcaccagtt        660
```

```
catgcagtaa at                                                                672
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```
<210> 39
<211> 1908
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (63)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1893)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1908)
<223> n equals a,t,g, or c

<400> 39
agagttgata tttttagaaa cagtaatttt acttttaagg aaattggcta gctctttgac        60
tnnagagctg taggaagctc aacatttctt tgtagagaac gttgcttttt ttggattgta       120
caggtataaa aacattgctt ttgttgaatt gtataggtgt aaaaagggaa taactgtatg       180
caggtttgaa aaggaaatgt gctttaggca tgagtcataa gatgccattg tacttgtagg       240
cattttattt tcctttagaa atggacatca gctcttctct tctgactggt aacacatagc       300
cccaaagcat gagattattt ttcattgggt ttttattgtt gtttagtttt ggtttgttac       360
gccagcccag tctgtctgcg gaacactgac tctgctctct aatgagaaca aagttagaaa       420
tctgccgata acctaaaata atttagaaat gaattaaaaa tgtgaaatcg ggttaaagtg       480
atgatgataa aatagcatgc aagaaacaag ctccttccat cagacttggc tactgtttc       540
ttctggtacg atttggtttg gaagagcctc ttgtttcctt ctctttgggg tatgtcttcg       600
tttcttaata tgtttgtaac attattgaga tataattcac ataccttaca attcacttat       660
tttaagggta caatttagtg gtttttagtg tattcacaaa gttgtgtaac cgtgaccaca       720
gtcaatttta gaacatttcg ttaccccaaa aagaaaccct gtacccttga gcagtcacct       780
ctcattttct cccagtgccc accccatccc cgagcccckg gaaccactaa tctatttctc       840
tctctgtaga tttgcttatt ctggtcattt catataaatg gaattctaca atattcggtc       900
ttttgggact ggcttcccaa atatgatttt ctatatggag tgagaaaatt cttctcatct       960
tgagaactct tattgctgtg aaagggagtg gttggtaaaa tcaatagatt tcaggcaaga      1020
gggccagata cctaacaggt ttttctccgt gaatcttatg ctgagtagtt tttcctcata      1080
accaagcatt tatgatatat tactacttat aatactgtgg ctagtctcta gaatggatgt      1140
tgaaatcttt gcctcctcag tcgggaagag tcctgctaaa aatcaggcta aaaatcaggc      1200
caaaaatcag gccaaatgac ttggcaaata attgacaaag tggtttcac gtgtgtctat       1260
ctttgctagc agcttgtata cctcaggcca ggtgagctcc ccaaatttct tttttcattt      1320
actccagtga gtttctgctg tcttttttcaa gtatgtacca taggacttaa aggtgatttg      1380
gatgcgttgt aacactgcta aatatgctaa gtacagaatt ttatctacag tactgtgaga      1440
cagtcaatta ttgcctaggg tagttcaaaa atatgatgtg agctagttaa gcctttgctt      1500
gactgatttc agtgatattc agaagtgtgt accaatcaag gctctttaaa atacggaacg      1560
actcacttaa taaccaggga accagccaaa tactgtgcag ccgcagaata tgcatatcaa      1620
tgagttggag gtgattattc tctgtaactc cctaatgatt gtttttctaag cattgtggct      1680
tctcagtggc ttgacagcat cttcctggtt gtatgtggcc tgtttacatg atgtattgaa      1740
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taatgttgtt tgttgtgagc atcaatgcct gtaacaccaa actaaacacg tgtttttggg    1800
atatgtttcc aatctttaaa tgaccttgcc ctgtccaata aataaatgat tgtctcaccc    1860
tgttaaaaaa aaaaaaaatt aaaaaaactg ggnggggggc ccggtacn                 1908


<210> 40
<211> 458
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (443)
<223> n equals a,t,g, or c

<400> 40
cctcaaaaaa aaaaangaaa ggaaagaggt ctctacacaa gcccgtgatt cttcatggca      60
agggataaca tcagaaatgt ttcatttyck gctattagtt tccattcctt tccccatcca     120
ggcataaaga gaaacaaaag acaatgatgg tattctctgt gtcctcagct ttggcacttt     180
tgttgatgtt gctaaggagc agtgaccttg ctaaaaagac tgaataatcc acccactgaa     240
tagctaacct ggggaggaaa tgaaaatttc ctttgtggat ctccccaaat ccattgttgt     300
caccaggccc tcccagaacc tcctcagttc cttcacagtg caaccctgtg tacttggccc     360
gcaacccaat agtattgtgc ctcacttcac cttccatggg caactgccct cccttctgga     420
cataaaacct catattttaa atnaagttga aatttgaa                            458


<210> 41
<211> 1153
<212> DNA
<213> Homo sapiens

<400> 41
ggcacagagc ctccgaccca ggtggtctgg agcctgccgg gagagtggtg gcatctgaga      60
ggctggtcgt ggactgtggt tgggggaggt gggagctgtt ttaaccgtgt gcccctctc     120
ctgtgccggc gtgggcatcc cccggggcag tggaacccgg gcgctcctcc agcttccgag     180
tccagccagc ctgggcgcgg ggcgcgcccc gagacacccg aggagtccgt tcctccctgg     240
ttacgtggac tgtgggagctg gtctcttgtg gctcagccgc gtgcggaggt tgaagcgtac     300
ctgcggaggt cgcaccaggg cgtggaggagg aggaggaagg gcatgagccg agcttgagga     360
atccgtgctc caaactctac actcaaggat cgcactgcgca actctgtgg cgatgggctg     420
gggcagatgt ccttggagtt ctaccagaag aagaagtctc gctggccatt ctcagacgag     480
tgcatccat gggaagtgtg gacggtcaag gtgcatgtgg tagccctggc cacggagcag     540
gagcggcaga tctgccggga gaagtgggt gagaaactct gcgagaagat catcaacatc     600
gtggaggtga tgaatcggca tgagtacttg cccaagatgc ccacacagtc ggaggtggat     660
aacgtgtttg acacaggctt gcgggacagtg cagccctacc tgtacaagat ctccttccag     720
atcactgatg ccctgggcac ctcagtcacc accaccatgc gcaggctcat caaagacacc     780
ctgccctctg agcgtcgctg gatctctgtgg agctccttga tggctccag accttggctt     840
ttgggaattg cactttttggg cctttgggct ctggaacctg ctctgggtca ttggtgagac     900
ttggaagggg cagccccgc tggcttcttg gttttgtggt tgccagcctc aggtcatcct     960
tttaatcttt gctgacggtt cagtcctgcc tctactgtct ctccatagcc ctggtggggt    1020
cccccttctt tctccactgt acagaagagc caccactggg atggggaata aagttgagaa    1080
catgagtttg ggctgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1140
aaaaaaaaaa aaa                                                      1153
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<210> 42
<211> 1983
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1179)
<223> n equals a,t,g, or c

<400> 42
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ggcacgagag gggccgagcc gacaagatgt tcttgctgcc tcttccggct gcggggcgag      60
tagtcgtccg acgtctggcc gtgagacgtt tcgggagccg gagtctctcc accgcagaca     120
tgacgaaggg ccttgtttta ggaatctatt ccaaagaaaa agaagatgat gtgccacagt     180
tcacaagtgc aggagagaat tttgataaat tgttagctgg aaagctgaga gagactttga     240
acatatctgg accacctctg aaggcaggga agactcgaac cttttatggt ctgcatcagg     300
acttccccag cgtggtgcta gttggcctcg gcaaaaaggc agctggaatc gacgaacagg     360
aaaactggca tgaaggcaaa gaaaacatca gagctgctgt tgcagcgggg tgcaggcaga     420
ttcaagacct ggagctctcg tctgtggarg tggatccctg tggagacgct caggctgctg     480
cggagggagc ggtgcttggt ctctatgaat acgatgacct aaagcaaaaa aagaagatgg     540
ctgtgtcggc aaagctctat ggaagtgggg atcaggaggc ctggcagaaa ggagtcctgt     600
ttgcttctgg gcagaacttg gcacgccaat tgatggagac gccagccaat gagatgacgc     660
caaccagatt tgccgaaatt attgagaaga atctcaaaag tgctagtagt aaaaccgagg     720
tccatatcag acccaagtct tggattgagg aacaggcaat gggatcattc ctcagtgtgg     780
ccaaaggatc tgacgagccc ccagtcttct tggaaattca ctacaaaggc agcccaatg     840
caaacgaacc accctggtg tttgttggga aaggaattac ctttgacagt ggtggtatct     900
ccatcaaggc ttctgcaaat atggacctca tgaggggtga catgggagga gctgcaacta     960
tatgctcagc catcgtgtct gctgcaaagc ttaatttgcc cattaatatt ataggtctgg    1020
ccctctttg tgaaaatatg cccagcggca aggccaacaa gccggggggat gttgttagag    1080
ccaaaaacgg gaagaccatc caggttgata acactgatgc tgaggggagg tctcatactgg    1140
ctgatgcgct ctgttacgca cacacgttta acccgaagnt catcctcaat gccgccacct    1200
taacaggtgc catggatgta gctttgggat caggtgccac tggggtcttt accaattcat    1260
cctggctctg gaacaaactc ttcgaggcca gcattgaaac aggggaccgt gtctggagga    1320
tgcctctctt cgaacattat acaagacagg ttgtagattg ccagcttgct gatgttaaca    1380
acattggaaa atacagatct gcaggagcat gtacagctgc agcattcctg aaagaattcg    1440
taactcatcc taagtgggca catttagaca tagcaggcgt gatgaccaac aaagatgaag    1500
ttccctatct acggaaaggc atgactggga ggcccacaag gactctcatt gagttcttac    1560
ttcgtttcag tcaagacaat gcttagttca gatactcaaa aatgtcttca ctctgtctta    1620
aattggacag ttgaacttaa aaggttttttg aataaatgga tgaaatctt ttaacggaga    1680
caaaggatgg ttatttaaaaa tgtagaacac aatgaaattt gtatgccttg atttttttt    1740
catttcacac aaagatttat aaaggtaaag ttaatatctt acttgataag gatttttaag    1800
atactctata aatgattaaa attttttagaa cttcctaatc actttcaga gtatatgttt    1860
ttcattgaga agcaaaattg taactcagat ttgtgatgct aggaacatga gcaaactgaa    1920
aattactatg cacttgtcag aaacaataaa tgcaacttgt tgtgcaaaaa aaaaaaaaa    1980
aaa                                                                 1983
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<210> 43
<211> 1406
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (141)
<223> n equals a,t,g, or c

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<220>
<221> SITE
<222> (812)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1340)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1391)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1402)
<223> n equals a,t,g, or c

<400> 43
atgatgatga ctttgaagac gattttattc ctcttcctcc agctaagcgc cttgaggtta      60
atagttggaa aagactctat agatattgac atttcttcaa ggagaagaga agatcagtct     120
ttaaggctta atgcctaagc ncttggtctt aacttgacct gggataacta cttttaaagaa    180
ataaaaaatt ccagtcaatt attcctcaac tgaaagttta gtggcagcac ttctattgtc     240
ccttcactta tcagcatact attgtagaaa gtgtacagca tactgactca attcttaagt     300
ctgatttgtg caaatttta tcgtactttt taaatagcct tcttacgtgc aattctgagt       360
tagaggtaaa gccctgttgt aaaataaagg ctcaagcaaa attgtacagt gatagcaact     420
ttccacacag gacgttgaaa acagtaatgt ggctacacag tttttttaac tgtaagagca     480
tcagctggct ctttaatata tgactaaaca ataatttaaa acaaatcata gtagcagcat     540
attaagggt tctagtatgc taatatcacc agcaatgatc tttggctttt tgatttattt      600
gctagatgtt tcccccttgg agttttgtca gtttcacact gtttgctggc ccaggtgtac     660
tgtttgtggc ctttgttaat atcgcaaacc attggttggg agtcagattg gtttcttaaa     720
aaaaaaaaaa aaaacgacat acgtgacagc tcactttca gttcattata tgtaccgagg       780
gtagcagtgt gtgggatgag gttcgataca gncgctattta ttgcttgtca tgtaaattaa    840
aaaccttgta tttaactctt ttcaatcctt tgagataaaa ttgttctttg caagaatgat      900
tggtgcttat tttttcaaaa atttgctgtg aacaacgtga tgacaacaag caacatttat      960
ctaatgaact acagctatct taatttggtt cttcaagttt tctgktgcac ttgtaaaatg     1020
ctacaaggaa tattaaaaaa atctattcac tttaacttat aatagtttat gaaataaaaa    1080
catgagtcac agctttttgtt ctgtggtaac ctataaaaaa agtttgtctt tgagattcaa    1140
tgtaaagaac tgaaaacaat gtatatgttg taaatatttg tgtgttgtga gaaatttttg    1200
tcataagaaa ttaaaagaac ttaccaggaa ggttttttaag ttagaaatat tccatgccaa   1260
taaaatagga aattataaat atatagtttt aagcctgcat cagtgggagt cttggctatg    1320
tagttatgta gttattatgn aaccaccaag attttttttgg ctatttaccg taaccaaagg   1380
ggccgattaa ntggtttgaa gncttg                                         1406


<210> 44
<211> 1391
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1292)
<223> n equals a,t,g, or c

<220>
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```
<221> SITE
<222> (1294)
<223> n equals a,t,g, or c

<400> 44
gggcctgaag gcggcrcgcc agtcccgagc agtgctcgct cctgctcggg gcgctgcggc        60
cccgggcgtc gccatgacca gtgagctgga catcttcgtg gggaacacga cccttatcga       120
cgaggacgtg tatcgcctct ggctcgatgg ttactcggtg accgacgcgg tggccctgcg       180
ggtgcgctcg ggaatcctgg agcagactgg cgccacggca gcggtgctgc agagcgacac       240
catggaccat taccgcacct tccacatgct cgagcggctg ctgcatgcgc cgcccaagct       300
actgcaccag ctcatcttcc agattccgcc ctcccggcag gcactactca tcgagaggta       360
ctatgccttt gatgaggcct ttgttcggga ggtgctgggc agaaagctgt ccaaaggcac       420
caagaaagac ctggatgaca tcagcaccaa aacaggcatc accctcaaga gctgccggag       480
acagtttgac aactttaaac gggtcttcaa ggtggtagag gaaatgccgg gctccctggt       540
ggacaatatt cagcaacact tcctcctctc tgaccggttg gccagggact atgcagccat       600
cgtctgacttt gctaacaacc gctttgagac agggaagaaa aaactgcagt atctgagctt       660
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ctcacagatg gatgacatgg acatggactt agacaggaat ttctccagga cttgaaggag       780
gctctccggg aaagctgggc gtcttctctg agatggaagc caacttcaag aacctgtccc       840
gggggctggt gaacgtgccg ccaagctgac ccacaataaa gatgtcagag acctgtttgt       900
ggacctcgtg gagaagtttg tggaaccctg ccgctccgac cactggccac tcagcgacgt      1020
gcggttcttc ctgaatcagt attcagcgtc tgtccaatcc ctcgatggct tccgacacca      1080
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ctgaggtgcc tcccaacgtc cgcccacgct gacaataaag ttgctctgag tttggagact      1200
ggtcctcgct ccggggagca agtggggagc gtgcagatgt gcctgtgtct gtctctgagc      1260
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ctcagggaat ggtgtctgtg ctcagcccat ccaccagaag agtctgctca caaaaaaaaa      1380
aaaaaaaaaa a                                                           1391


<210> 45
<211> 1569
<212> DNA
<213> Homo sapiens

<400> 45
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ggcgggccgg ctgcctaccc tccagactgt ccgctatggc tccaaggctg ttaccgccta       120
ccgtcgtgtg atgcacttttc agcggcagaa gctgatggct gtgactgaat atatccccc       180
gaaaccagcc atccacccat catgcctgcc atctcctccc agcccccac aggaggagat       240
aggcctcatc aggcttctcc gccgggagat agcagcagtt ttccaggaca accgaatgat       300
agccgtctgc cagaatgtgg ctctgagtgc agaggacaag cttcttattg cgacaccagc       360
tgcggaaaca caagatcctg atgaaggtct tccccaacca ggtcctgaaa gcccttcctg       420
gaggattcca agtaccaaaa tctgctgccc ctttttgtgg ggcacaacat gctgctggtc       480
agtgaagagc ccaaggtcaa ggagatggta cggatcttaa gggactgtgc cattcctgcc       540
gctgctaggt ggctgcattg atgacaccat cctcagcagg cagggctttа tcaactactc       600
caagctcccc agcctgcccc tggtgcaggg ggagcttgta ggaggcctca cctgcctcac       660
agcccagacc cactccctgc tccagcacca gcccctccag ctgaccaccc tgttggacca       720
gtacatcaga gagcaacgcg agraaggatt ctgtcatgtc ggccaatggg aagccagatc       780
ctgacactgt tccggactcg tagccagcct gtttagccag ccctgcgcat aaatacactc       840
tgcgttattg gctgtgctct cctcaatggg acatgtggaa gaacttgggg tcggggagtg       900
tgtttgtcac ttggttttca ctagtaatga tattgtcagg tatagggcca cttggagatg       960
cagaggattc catttcagat gtcagtcacc ggcttcgtcc ttagttttcc caacttggga      1020
cgtgtagga gcaaagtctc tccattcttcc aggtccaagg cagagatcct gaaaagatag      1080
ggctattgtc cctgcctcc ttggtcactg cctcttgctg cgcgggctcc tgagcccacc      1140
cccttggggc acaacctgcc actgccacag tagctcaacc aagcagttgt gctgagaatg      1200
gcacctggtg agagcctgct gtgtgccagg ctttgtgctg agtgctgtta catgtattag      1260
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ttcctttact gctgaccaca ttgtacccat ttcacagaga aggagcagag aaattaagtg      1320
gcttgctcaa ggtcatgcag ttagtaagtg gcagaacagg gacttgaacc aagccctctg      1380
ctctgaagac cgcgtcctga atttcttcac tagagcttcc tcatcaggtt acccagaagt      1440
gggtcccatc caccatccag gtgtgcttgg atgttagttc tccaccctcg aggtgtacgc      1500
tgtgaaaagt ttgggagcac tgctttataa taaaatgaaa tatattctaa aaaaaaaaaa      1560
aaaaaaaa                                                             1569


<210> 46
<211> 1924
<212> DNA
<213> Homo sapiens

<400> 46
gggccccccc wcgwkttttt tttttttttt tttaattagg ataatgcctt tattaacgag        60
aatgaaacgt tcattcctcc ttccactcct tctcgttggt tttctggaca cagctcacct       120
gatcctgcta gaaacgttgt cagtctgctt gtggcttccc tccttgattg actcacgctg       180
tgtgatgtct tgagaagtat ctatccactt catgtgaatg agcactccaa tatcagccaa       240
catcaatcat tcttacctaa agaataataa gaaaaagtta atataaaaga caagggtata       300
aaataaaggt ttgaaaatgc tagtcaactt caaaatttaa agagtaaaaa tccagagata       360
aagattgggg gtaagttaca gcataaaaaa ataggaagaa acttcatggt gggggggaaa       420
tctaaaatta ttcttacata aaataagtag acacctgaat tagaatgaaa actgtatttt       480
ctttaaaatg taaaagcctg actctcagtt tcaccagtct gagcacaagt ttgactgcaa       540
cccaaaatat actatccctt atgtgaaggt atgtgacaac gttgacctca ccaaatgagt       600
tttaacatca gctctttttt catatgaaag cacataccct gctccccatt caagtatgtc       660
ttccattgtc aggcaggctg accaccttca gcaggagtcc tccaagagtg cccaactccc       720
cttccacag tacacaacgc tgtagttgtt gtcctgcaat ccttgtatt tacctcattc        780
tttcccatct aagtcctcac tgagttttaa agttagggct ggaaaagcta tgccttactg       840
ggacagcaag gaaccaattt ttttctgagg gagaagacat tcaccttcac tatatgcctg       900
gcagggccac agtgcacaaa acaaagatca gccttcattc aagttccagg ttttttcttcc      960
tccctgaatg attactgcaa agggtatatg aagtaagagt tccctgttgc acatgtacca      1020
tccataaggg atactatatc gttttgcatt cttccccca ttctccacat tgtcctatct      1080
taagtccaag ccctttttcac tctcaaaaaa aaaaaaaaaa tattttttc agcactggtg      1140
ttcaaaagca acgttttttat ggttaatggt ttaccagcaa ctgttgagat ttcagttga      1200
gtcttaaaaa ttgccaatca ttatctagca gcaatgacag atgattagga gcagtcaaat      1260
cctctgaatt cttccctaa taggcagcca tttgagaact gcactagctg acatcactaa      1320
aacattatca gctaaagcca aaaccaaata aaggcccaga ccaacatcct ggctctctaa      1380
aacctgtcca aaatcattaa gtgaaaggca gtaaatgcag gactgtggat catgtcactg      1440
cagctgacaa tgattaacaa taggagacat gcaaccccca ttaaggttaa aagtccaaaa      1500
ctagtcacac gcatctcttt attggggaaa agtgagacta ttatgcattc ttggtaggtt      1560
tgcaaccttg catgaaggac acccattgca tttctttcat ctttcagaaa gcaccggtat      1620
ctgttccaag ggcctaacag tacgaaaata cattctggca tcacacctct gaacccaaga      1680
ctgttctcat taaaaataat tttggtttgt aacaaaatta tgaaatacaa tgcaagcacc      1740
tcggtatagc attattactg aaaccactta attccagct ttttgagttt tttaaaaaaa      1800
cccactgcac taagattcac aattcattgc tacatacaaa ttaaagctag taagaacaca      1860
ctaacgtcac aagtttctca ttctaaagtg caaaagccta atcatctgaa agtgaacagg      1920
gtaa                                                                1924


<210> 47
<211> 475
<212> DNA
<213> Homo sapiens

<400> 47
tggtgtgggg cccagaaamc aagggaccag tgaaaacamc cccagagact tgtatccgcc        60
aggaaagcca ttgccamtyc tgagcccttg aagggcaagg agggaaacag tgttaccaga      ·120
gcccagtaag aactgctgtc atgaaggagg ggccaccttg taagagacat cattactacc       180
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agaactgtgg tgccaaattg ctggtgtctc tctttggaga aaccaaccag atacatctgc      240
tggagaccca ggtgggcaca gagaagggtg gagagagaat ctgggaagag aaatgggaaa      300
taagcagcac agtgttattc atttctgtaa attcctátgt agaaggctca gtgttagaaa      360
taaagttatt ctactagttg caagttaagt gtttctgttt gttctgcttt cctgttagca      420
taagtaaact ccctttggaa ctacacaggt atgtctctcc ttcaacatgt gtgaa          475
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<210> 48
<211> 346
<212> DNA
<213> Homo sapiens

<400> 48
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aagggacaga gacctggatt cagatctcat tttacaatga agaccccaat gcagaaagtc       60
atgtctgaaa ttctgagctt actcttctgc ctgctgggac ctgctctgga tgagagaagg      120
gaggaaaagg actaatcaga ggagccaatg aagtcactcc atgagtttcc tgaaccctgc      180
ccagctagga attaacgtyt gaccwtcaac gtaggacact gtgcagatgg ctacttgctg      240
gcgcacatga agaccaaagc caggaccaag ccccmascct gctwaacacg gcagartctt      300
gcccagccma cytctgtgar aatctgcttc cctccacagc tgaccc                    346
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<210> 49
<211> 1366
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (499)
<223> n equals a,t,g, or c

<400> 49
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taggtgtcag ccgccaccc ccccccatat gcagatttac tsggcatggt agtggccagc       60
ttctaacaca gctggtattt caagtctcct gggacctcac tcaggaatga taccccctca      120
gtagaagcag caggtgatct taactccttt caaagagcag gcctgtctgg gaagccatgt      180
cctcagcagg cacagcaacc cctctgaaaa tggatcacaa actcacttct cagccaggca      240
ggccaagctt ctattgtaac agtaggcaca gtatagtcgg atcatcacat cagctgggtt      300
tttggtttag tcatctagag tcgtctggac taaaggtctt tcaggtctcc ttgccctgtg      360
agtgcgtgaa cctccccacc cgaattgcct cagttgtcct gagcctcatg tctctcctgg      420
tggtgggcca ggccctgca tgggaaggga gcctgctgcg gggcaggcca gctggggtg      480
ctcacctatg cgcaatgana gttattgaag gactggttgt tgatgttggt gagcgtatcc      540
ttcatggcca gcgcgaagtc ggccaggtca gccaggtgct gccagcgctc tctctcggac      600
ttgtcttcct gtgccagggg accgtggaga aagtgtcagg ggccgctcac tgcagcagcc      660
tgctctgctg ccttccctgg cagtgttctg ggggtggatt ccctacamct agatgttcaa      720
ggccttactt ttcctcccac aaaggagtcg cagccacgct agctctgact tgccactgtg      780
acaaagttca cgtagcaggt ctaggcaaag actgggcaat tgagcagagg agacggacct      840
gtgagtctga ccrygagscg grccccttca ccttggctgg gctggtcctg gtccttaggt      900
tttgtcaggt tgtccttgtt tggatccctc aactaggtga aactaggtga agggggatga      960
cccgccttgg acgtgtttct ttaacctcat ccatataata gggccgtggg atggttgtag     1020
aggtaaagca ggatgatggt gttttaagac cagagcttgg gaccagggct cctacaccta     1080
attttctctc ctggtagctg aacaaaggtc taaattagct taacaaaaga acaggctgcc     1140
gtcagccaga ggtctgaagg ccatgctttc agtttccctt gttgacaatt gctctccagt     1200
tcctatgaaa gcacagagcc ttaggggggcc tggccacaga acacaaccat cttaggcctg     1260
agctgtgaac agcaggggggt tgtgtgtctg ttctgtttct ctgcttgccg aactttctca     1320
ataaaccta tttcttattt ataaaaaaaa aaaaaaaaaa aaaaaa                      1366
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<210> 50

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<211> 1405
<212> DNA
<213> Homo sapiens

<400> 50
gcagtaattc ctgttagcca ctgcatccac caaaactagt ttatttttcc cctcaaattc      60
atgattttta cgtctgttac aaagggaatt ttgctgatag ctctttgggt cccactgttc     120
cattttatgc taatagattc cattctaggg cccagccgtc tcttgactga tggtgttccc     180
tttaaccctt ggcatgtata atagaatttt ggtgaatgaa agaacccaaa taggccagat     240
agtccccca ggccctgata tccataaaag gcttgggaat gcattatgta attgtcctta     300
gtcttttgt tgttttagaa aaaaaaaca agatgggctc agatggatgc ctacgtaaaa     360
atggttccta gctgtgtact cataacttt cttgaattg agtagtgaaa ggaaggagga     420
ggaaaggaaa ttaaatgtcc ttctagtatt ctctggactc aagtctgaca tatgagataa     480
taacctatat tgaaatgcca agaattgtat ctgaaacaag agaacagttt gacacattta     540
tcatgccttc atattacata ttaactgaaa ccaattaata aacatatgaa atatccattg     600
cacaaggcaa aggcacctaa accttttgtt tccttttcta catagcagaa attgattttt     660
tttttatttt tttaggggaa cctatataat tatgacccag tgatgtcttt tggtgactta     720
agcttatgaa ttcaggttac aattgagttg attctagatg gttactacct tgaaaaggat     780
gttggtgcct tatgtgacac gagccagagc ctgctgggga ataaacaaag caggtttcat     840
gccaacacca actcgtagct ttagtgggca gatgggagt ggtcacaga cttcccaaaa     900
tgtgggggct ttgggatttt ccacaccatc ccacgtgtgt tgttcattct tcctcttttc     960
acactcttgg atggatwatt tgraaatggt graawymmcy yykraatttg cccaatagcc    1020
wtgrgccacc attcttwatg acaccataac caaatagttc cwtaatgttg aaatattaga    1080
aacctgttac cagccyksma ktwacccwwa wtttcccat gtttgtggaa ttgatattga    1140
aatagcaggg ctaaggaatt actggcaagt tttagcctgt gggtaatacc ttagggttat    1200
ttaaatattt gtaattttat ttaaatgttc atgaatgttt gaaagganca aaattatcag    1260
ggatggctct ttgccatggg tcttatttttc accctctttt ctgtaagaaa aaagaacaat    1320
gtcttaatgt atttttaaag ttttggtat agtttctaat tccaattta ataaaagttt    1380
twtrtaaaaa aaaaaaaaaa aaaa                                         1405


<210> 51
<211> 2633
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> n equals a,t,g, or c

<400> 51
ttcggggccc cccccnagtt ttttttttt tttttttcct tcttaaaaat attacatgtt      60
ttattatcct gtccccagag ggtggtttat ccagaaacca agaaaaaaa tcaatcagaa     120
taaactcaaa aaaaaaggt aggggagca aaaccatcaa ccaccaggca gccaggccat     180
cagccacct ccacctctgg agggtcccca gagacccacg cccgacgcag acccggagga     240
gcatcagcaa ggggcccggg cagagaatcg gctatgtctt cattatggca gcaggagaga     300
cggcagagat atgttgctag gtgaatatat atttatatax taaatccgta agttaataaa     360
gtaaatagta attctctgaa agttttaat tctttctttt ttatagtttt tttgttttg     420
tgattttttt tttttttggt ttttgttgtt ttgtgtttt ttccttttt tttttttggt     480
tcttagaaaa tctgagacac gtgaggccag acaaagcaag gccggggctg gtgggatggg     540
gtgcggttca gggggccccg gtctgccaac tcagctcctc tgctgcaaaa gcggggtgct     600
tgttggggcc atctcctggc aatggcaagt gagtctggag cagagagggg agagggctg     660
ggtgggtccc cagccgtcag gtggtggtgg cgccctctgc tggccctcg catggcccag     720
gcagttcctc gacaaggcac atggggcttt ggctggatt ggggaggcct tgaaggggacc     780
tcagagcaaa ggaagagacc tgggtgtggt gaggcatccc agggtaactt agggacpggt     840
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ttaccagacc agaagcgctg gccccaagtc tccccaacct ggtcgggga acctcctggc     960
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caacccacaa agagagagag gagagagcct gcccagccc ctccctgccc acccacccac      1020
cccggaggac tgcagagagt gctttgcata gatacagagt ggaggaatgg gactgtgggg      1080
ctgcccaggc ccctcctgga ggccgtcggg ggtgttgggt caggtctctg gggcctcaca      1140
ggtygctctc gccatacaag gccgtggaga aggacttgta gtcgagggca ccgggcacgg      1200
cgtcagggcc ctggtatggc accatgcggg cgatgcagta ctcggcctgg tcgggggggca      1260
gctctctccg cagctcctca gctgtgatga agttcttgtc ccctgctarg accttgaagg      1320
aagcgatgac ctggtcagcc gtgtccgtgt cggtggtctc ccgcgacatg aagtcgatga      1380
aggcttggaa ggtcacaagg ccgctatggt tggggtcgac caggctcatg atgcggttga      1440
actcggcctc accctgccgg tcgttctcca cgtcgtagcc caggctgatg aggcaggcct      1500
tgaactcctc gggccccagc gcccgccat gatccttgtc gaagtggttg aaggacgccc      1560
ggaactcctg catctgctcc tggctgatgc ccttggcgtc gcgggtgagg atctggttct      1620
ccacctcgtt gatggtgcgg gcaatggtgg tgagcagctg ctccagccc acgcggatgt      1680
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gctgctgctc cagcaggtcc aggtgggct tgtagtccac gatgctgcgt tcatactgct      1800
tcaggtggct cagctggtcc tccagggtcc cgttcatctc aatggagatg cgcccgatct      1860
cctccatctt ggtctggatc cagggcccca caacattggc ctggctggcg aactggcggc      1920
gcaggtgctc gttggactgc tgcttgctct gctcctccag gagggcatgg tcccgtttg      1980
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ggatggccag gatggcctcg cgctccctat cggcgtccgg cagggtggac ttgaactggt      2160
catgggctga gatcaggccc tcaatctcct cgatggtatg gacgatgaac atgtcctgga      2220
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ggtgcagctg gtcgatggcc tccagctgct tctctgtttt ctccagggct tccctgcgac      2340
tatgtgtcag agagccgagg gcgtcccact ggtcacagat cttctggcac cgggtgttga      2400
cattgtggga gtcgtagtaa tccagctcgt tgagctcctg ggcaatggcg gcgatctgct      2460
ccacgcggtc ctggtgcgca gccaggtcgc tctcgaaggc ctcgtgcttg cgaatgaggg      2520
ctttgatgtc cgatagtgtg gccgtctcgt agtcccggtg cttcagcatg gcttccttcc      2580
cgtcagtcca ggcctcgtgg atggaggcct tctgccggaa cttctctcgt gcc            2633
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<210> 52
<211> 777
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (168)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (755)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (771)
<223> n equals a,t,g, or c

<400> 52
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naagtatctt ggccagttta ttacagagga cgataaatga ttccatgtgg ataggcata       60
acatacagag aatgagacta tgccagaaat gggaggaggc atttgaaaca acatgagtat      120
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ctcagggaca gatggattga ttctgctatt ggtaggcctg gaagcaangg tcagaagtag      180
caaaaaatgg ataccaaaag cactattwgt cacccaagct aagtggaata gctggcccag      240
taggagaaat gcaggttttg ctctacacta agttctccaa ctcttgataa gcctccaaaa      300
acaaatgtta ggggaaaaaa acgcagctgg ttatgaaaag atatatctca tttcattaaa      360
aaatcaatgt caatgctgtt aatagaatcc tttatcttc aggacagagg caatgcccta      420
aacaaacacc agctcaagag cctctgatgc caacctagag ggtacccaaa cacaaactta      480
gcatagaggt agaatctct atgtctttg gtgggagcga agccatttgt ttggtacttc      540
acaggaacat ctttctacca agtcttcatc atatggtatg tgccacgagt ctccagttgt      600
ttgcaccact gtgtcatagc tgagaatacg ctgaaaggtt agtttttgatc ctggaaacct      660
atttacaatt gccagctgat gtccctgctg ccacttaaaa aaggcttggg tctggcatag      720
gcagamaggc ctgtggtccc ctcgtgccga ttctnggctc gaggccaatt nccttat      777


<210> 53
<211> 602
<212> DNA
<213> Homo sapiens

<400> 53
atgactacag tgttataccc tccaatcttt gcaggtgggc atggaacact gcttgtatca      60
ctctgtgcac ggtataaatc catatatcca caaaacaca catccatcca tcaacatata      120
catgtttgg gatgagcagg tcaatagttt tgagagggag tttgttcctt ttttttttct      180
cattatactc ttaaattgtt gtcagttatc aaacaaacaa acagaaaaat tgtttggaaa      240
aaccttgcat acgcctttc tatcaagtgc tttaaaatat agactaaata cacacatcct      300
gccagttttt tcttacagtg acagtatcct tacctgccat ttaatattag cctcgtattt      360
ttctcacgta tatttacctg tgacttgtat ttgttattta aacaggaaaa aaaacattca      420
aaaaaagaaa aattaactgt agcgcttcat tatactatta tattattatt attattgtga      480
cattttgaaa tactgtggaa gttttatctc ttgcatatac tttatacgga agtattacgc      540
cttaaaaata caaaataaa ttttacaagg ttccggtttt ggtggtggaa agagtaaatt      600
ga      602


<210> 54
<211> 1749
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1747)
<223> n equals a,t,g, or c

<400> 54
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cctcacttca gtttgaagag ggtccggatc caaaggggtt aaaacgagcg aaccccgatc      120
cccgaccaca cttcccgcct ccctaaaacg cacacccgc tagccatggg cagccgcgac      180
cacctgttca aagtgctggt ggtgggggac gccgcagtgg gcaagacgtc gctggtgcag      240
gattattccc aggacagctt cagcaaacac tacaagtcca cggtggggagt ggattttgct      300
ctgaaggttc tccagtggtc tgactacgag atagtgcggc ttcagctgtg ggatattgca      360
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ctagcagca agctcacact acccaatgga gagccggtgc cctgcctgct cttggccaac      540
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acccaagggg actacactca attacaaaac aagtcctcca gctggtcctg ctgctagtag      780
tgtttggctt attttccatc ccagttctgg gaggtcttt t aagtctcttc ccttttggttg      840
cccacctgac catttatta agtacatttg aattgtctcc tgactactgt ccagtaagga      900
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ttctcatcag ccctcaattt gtgatccgga attttgtgag aaggattaga aatcagcacc   1080
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cgtctctact aaaaagtacaa aaaattagcca ggcgtgatgg cacgtgtctg taatcccagc   1560
tactctggag actgaggtgg gagaatcgct tgagactggg aggcagaggt tgcagtgaac   1620
cgagatcatg ccaccgcact tcagcctggg tgacagagaa ggactccgtc tcaaaaaaaa   1680
aaaaaaaaaa aaaactcgag gggggggcccg gtacccaaat cgccstgata gtgatcgtaw   1740
acaatcnaa                                                          1749
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<210> 55
<211> 1896
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1825)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1862)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1871)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1879)
<223> n equals a,t,g, or c

<400> 55
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cctcctgtct actggctcca aatagaccat gtcagcttca ccccctggct ttgtgtctat   180
gggtggcctg tggtatatgg aaaagtagca gggtggtcag ggtgggagac acaagatgtt   240
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tgtttttttga cagattgttg aaattaaatg aattgaaagg gaaactcaga gtactaggac   360
gtttattaaa aggaaaaaaa tgtcttgcaa tgtgctgtaa tcacaagagg agaaaataac   420
ttgtttcctt gatctgtcag aggtcacagt aacctgggcc gagcgttat tatttattat   480
ataatagtag taggaagtta ataactggtt ctctgtgttc caagcacaat attacaactt   540
cttttgaacc gtaaatatca gaatgaatcc tcttcccagg ggattgaaca gaagcttaat   600
gtttacaagt gtttgaattt gtgatctgaa ataacacaaa attaaaaaca tgatttctct   660
aattttccaa ctagaggaag agaaacttgt ggaaaagttc tttttttttc tttttttttt   720
cttaaagaag ggcagccaag gtagtaacct aaaaatagtg cccaggcata tgagagttgt   780
cctacgaggt taaagaacac actgttccac tgtatggctt tggccctgag tggccaggga   840
ggtcaacttg accctgccat gttggtttga cttactaaga cacaggaatc attgtttttcc   900
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tattgacatg taaaagacca aagtaattct tctgaacttc tgcaattctg agaactctcc   1020
aaggaattta cagtgatttt agtgcttgtc agcattttc catgaggact ttcatacatt   1080
tgactcttta gttcacaggt tcccattgat tgtgagcaag atatttatct ctttagccct   1140
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cttccatgct atcggatgtg ttgggctcca tgcaagaact tggaagaaaa acaggcagga   1500
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actgataat gtggagtgac tagagaagtc ayatatcact gtaaggtaca gttaggggta   1680
acactttaga ggtttattat ttttaaaaaa cttttcttga actcctgggc caacatgggt   1740
gaaacccgt cttcttactt aaaaataccc aaaattaggc caggggcgtg gatgggtggg   1800
gtgcctgtta atcttcagct acttngggga gggcttgaag ccagggagga actgccctgg   1860
anccccgggg ngggccagna ggtttgccag ttgagt                             1896


<210> 56
<211> 1753
<212> DNA
<213> Homo sapiens

<400> 56
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agagaaaaaa aaaatcaggc ggtcaaactt agagcaacat tgtcttatta aagcatagtt    120
tatttcacta gaaaaaattt aatatcaagg actattacat acttcattac taggaagttc    180
ttttttaaaat gacacttaaa acaatcactg aaaacttgat ccacatcaca ccctgtttat    240
tttccttaaa catcttggaa gcctaagctt ctgagaatca tgtggcaagt gtgatgggca    300
gtaaaatacc agagaagatg tttagtagca attaaaggct gtttgcacct ttaaggacca    360
gctgggctgt agtgttattcct ggggccagag tggcattatg tttttacaaa ataatgacat    420
atgtcacatg tttgcatgtt tgtttgcttg ttgaattttt gaacagccag ttgaccaatc    480
atagaaagta ttactttctt tcatatggtt tttggttcac tggcttaaga ggtttcttcag    540
aatatctatg gccacagcag catccagtt tccatcctaa taggaatgaa attaattttg    600
tatctactga taacagaatc tgggtcacat gaaaaaaaat cattttatcc gtcttttaag    660
tatatgttta aaataataat ttatgtgtct gcatattgca gaacagctct gagagcaaca    720
gtttcccatt aactcttct gaccaatagt gctggcaccg ttgcttcctc tttgggaaga    780
ggaaagggtg tgtgaacatg gctaacaatc ttcaaatacc caaattgtga tagcataaat    840
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tgttttaacc tttgagacaa ttgacagaaa ttatgcaatg gtttgttgag atacggactt   1080
gatggtgctg tttaatcagt ttgcttccaa agtggcctac tcaagaggcc ctaagactgg   1140
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gattgtgata gcaatgaatg gtatgatgaa gaaagtttga ccaaatttgt tttttttgttg   1260
ttgttgttgt tttgaatttg aaatcattct tattccctt aagaatgttt atgtatgagt   1320
gtgaagatgc tagcgaacct atgctcagat attcatcgta gatagtttttg tttaaattct   1380
agagtttcag atcggtcact gatagtatgt atttcttcag taagaatgtg ttaaaattac   1440
aatgatcttt taaaaagatg atgcagttct gtatttattg tgctgtgtct ggtcctaagt   1500
ggagccaatt aaacaagttt catatgtatt tttccagtgt tgaatctcac acactgtact   1560
ttgaaaattt ccttccatcc tgaataacga atagaagagg ccatatatat tgcctcctta   1620
tccttgagat ttcactacct ttatgttaaa agttgtgtat aattgttaaa atctgtgaaa   1680
gaataaaaag tggatttaaa ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1740
aaaaaaagg ggg                                                      1753


<210> 57
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<210> 57
<211> 1220
<212> DNA
<213> Homo sapiens

<400> 57
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cggagcgagg ttctgcttac ccgaggccgc tgctgtgcgg agaccccggg gtgaagccac     120
cgtcatcatg tctgaccagg aggcaaaacc ttcaactgag gacttggggg ataagaagga     180
aggtgaatat attaaactca aagtcattgg acaggatagc agtgagattc acttcaaagt     240
gaaaatgaca acacatctca agaaactcaa agaatcatac tgtcaaagac agggtgttcc     300
aatgaattca ctcaggtttc tctttgaggg tcagagaatt gctgataatc atactccaaa     360
agaactggga atggaggaag aagatgtgat tgaagtttat caggaacaaa cgggggggtca     420
ttcaacagtt tagatattct ttttatttt tttctttttcc ctcaatcctt ttttattttt     480
aaaaatagtt cttttgtaat gtggtgttca aaacggaatt gaaaactggc accccatctc     540
tttgaaacat ctggtaattt gaattctagt gctcattatt cattattgtt tgtcttcatt     600
gtgctgattt ttggtgatca agcctcagtc cccttcatat taccctctcc tttttaaaaa     660
ttacgtgtgc acagagaggt cacctttttc aggacattgc atttttcaggc ttgtggtgat     720
aaataagatc gaccaatgca agtgttcata atgacttttc aattggcctc gatgttctag     780
catgtgatta cttcactcct ggactgtgac tttcagtggg agatgggaagt ttttcagaga     840
actgaactgt ggaaaaatga ccttttcctta acttgaagct acttttaaaa tttgagggtc     900
tggaccaaaa gaagaggaat atcaggttga agtcaagatg acagataagg tgagagtaat     960
gactaactcc aaagatggct tcactgaaga aaaggcattt taagatttttt taaaaatctt    1020
gtcagaagat cccagaaaag ttctaatttt cattagcaat taataaagct atacatgcag    1080
aaatgaatac aacagaacac tgctctttt gattttattt gtactttttg gcctgggata    1140
tgggtttaa atggacattg tctgtaccag cttcattaaa ataaacaata tttgtaaaaa    1200
tcawaaaaaa aaaaaaaaaa                                               1220
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<210> 58
<211> 1049
<212> DNA
<213> Homo sapiens

<400> 58
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caagcctccc tcaatttctg gtgcagccca tcagggaccc acagcgcctg ggaggatggt     120
gcggatcttg gccaatgggg aaatcgtgca ggacgacgac ccccgagtga ggaccactac     180
ccagccacca agaggtagca ttcctcgaca gagcttcttc aatagggggc atggtgctcc     240
cccaggggt cctggccccc gccagcagca ggcaggtgcc aggctgggtg ctgctcagtc     300
cccttcaat gacctcaacc ggcagctggt gaacatgggc tttccgcagt ggcatctcgg     360
caaccatgct gtggagccgg tgacctccat cctgctcctc ttcctgctca tgatgctttgg     420
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agcaggcata tttggagggg atctggtggt gccttgaagg tatgatcaga gaggggacca     600
caggtgtgtg ttttcccttt gtgttaagcg tgaggcagag ggagacgtta gtcccagcat     660
ttcccaaagt gtgggtgggt ccgttggttc ccgagatact tttaggtggt atggggcctg     720
cattaagtgg cacaaaatca gagcaagaaa gcgatgccct tcccaattct ctcaatcctt     780
ttatgccgag aagatctcag ctggatgcca acatgttccg atgcctgtgg aagacatgcc     840
gacgtctcct ctgcctaggg agcaggactt gggcttaggg caggtggaaa aaattccaga     900
ctttttagc actgttttg ttttaatggt atattttat tggctacttt attgtttagg     960
acaagtggta gtggcattct atttattgtg accttttcaa taaatagatt taagtaaaaa    1020
aaaaaaaaaa aaaactcgag ggggggccc                                     1049
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<210> 59
<211> 1776
<212> DNA
<213> Homo sapiens

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<220>
<221> SITE
<222> (713)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (862)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1752)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1773)
<223> n equals a,t,g, or c

<400> 59
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ggactggatt gtaaaggcac taagtcgttc tgcggtgaga atcagacatg ggggacctct      120
agcttcacat cctctttcct tgcagstctg gacatcctga gcccaagtcc cccacactca      180
gtgcagtgat gagtgcggaa gtgaaggtga cagggcagaa ccaggagcaa tttctgctcc      240
tagccaagtc ggccaagggg gcagcgctgg ccacactcat ccatcaggtg ctggaggccc      300
ctggtgtcta cgtgtttgga gaactgctgg acatgcccaa tgttagagag ctggctgaga      360
gtgactttgc ctctaccttc cggctgctca cagtgtttgc ttatgggaca tacgctgact      420
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aggctcttgc cctgcgtaat gtgcggcagc tggaagacct tgtgattgag gctgtgtatg      600
ctgacgtgct tcgtggctcc ctggaccagc gcaaccagcg gtctcgaggtt gactacagca      660
tcgggcggga catccagcgc caggacctca gtgccattgc ccgaaccctk aanaaaaacc      720
attaaagtta cgacggcagc agcagccgca gccacatctc aggaccctga gcaacacctg      780
actgagctga gggaaccagc tcctggcacc aaccagcgcc asccagcaag aaagcctcaa      840
agggcaaggg gctccgaggg ancgccaaga tttggtccaa gtcgaattga aagractgtc      900
gtttcctccc tgggatgtg ggtcccagc tgcctgcctg cctcttagga gtcctcagag      960
agccttctgt gccctggcc agctgataat cctaggttca tgaccttca cctcccctaa     1020
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gtactttctg tttttgtga cttcatgtgt tccattgctc cccgctgcca tgctctctcc     1140
cttgtttcct taagagctca gcatctgtcc ctgttcatta catgtcattg agtaggtggg     1200
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gggtatatag attgtgtattaa aaaaaaaaag gtatatatgc atatatctat atataatatg     1680
acgcagaaat aaatctatga gaaatctatc tacaaamwaa aaaaaaaaaa aaaaaaaaaa     1740
aggaattgaa tntcaagctt atcgataccg tcnacc                              1776
```

```
<210> 60
<211> 443
<212> DNA
<213> Homo sapiens
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<220>
<221> SITE
<222> (341)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (436)
<223> n equals a,t,g, or c

<400> 60
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attgagagat ttcacatgaa agccaggatt tctggcttcc caggaacagt cagaagagct     120
agctagcaac actggtctgc ttggctacct tctttggaac aacatgaaat ctagctccct     180
tttttttttt tttttggccc acttcatcca ttccatgac ctgcctggcc tctgcaggta     240
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cagctctgcc acttgctagc atgacctcgt gccgaattcc ngcacgaagt tttttttttt     360
tttttcagtg ctccagtccc cctattggag aatcctgccc ccccctggga cagaatgttc     420
accctggccc cgcgantccc tga                                             443

<210> 61
<211> 2888
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (112)
<223> n equals a,t,g, or c

<400> 61
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atggtatagc ttccgttcct actaaacaga tgaagttgc agcctcaggc gnctttctcc     120
accacatggc tgggctaagc agttccaagc tttccatgtc caaggcctc cctctcacca     180
aagtggttca gaatgatgca tacacagctc ctgctctccc ttcctctatt cgaacaaaag     240
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acatgaatgg gaatgttatc acctcagacc agcccatcct gctgcgggctg agtgacagcc     600
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gtgcttaggg tagggatggt aaatatcctc cctgcatggc tttatccttc ctctcatccc      2520
aaagcaggta tcttctggtt gtcacagagt ttcattgagt ccagctgcag ccacgtggcc      2580
atctggagct ggtgctatag gtgaccatct ggtacattga gggacctgt tgcctcctcc      2640
cactctataa gcagtcatct tgggagaccg ggaggagaag gtggtgggct agtcctgtgt      2700
cctcctccac ttcccatgcc tctatgttac ccatctgtgt ctcctgtgca gaaggagagg      2760
aaggggcatt aagagatgaa gggtgattat gtattactta tccatttctg aataaacatt      2820
tgttattcct aaaaaaaaaa aaaaaaaact cgaggggggg cccggwaccc awatcgccsk      2880
aaagtgag                                                               2888


<210> 62
<211> 1851
<212> DNA
<213> Homo sapiens

<400> 62
cactagtata atttataatt ataacctatt ctgatttctt ttcaaatatt aggtgtccta        60
gttgcctatg aaggtttgcc acttcatctt gcactgttcc ccaaactttg gactgagtca       120
tgccagactc agtctgctat gtcaaaaaac tgcatcaagc ttttgtgtga agatcctgtt       180
ttcgcagaat atattaaatg tatcctaatg gatgaaagaa cttttttaaa caacaacatt       240
gtctacacgt tcatgacaca tttccttcta aaggttcaaa gtcaagtgtt ttctgaagca       300
aactgtgcca atttgatcag cactcttatt acaaacttga taagccagta tcagaaccta       360
cagtctgatt tctccaaccg agttgaaatt tccaaagcaa gtgcttcttt aaatggggac       420
ctgagggcac tcgctttgct cctgtcagta cacactccca aacagttaaa cccagctcta       480
attccaactc tgcaagagct tttaagcaaa tgcaggactt gtctgcaaca gagaaactca       540
ctccaagagc aagaagccaa agaaagaaaa actaaagatg atgaaggagc aactcccatt       600
aaaaggcggc gtgttagcag tgatgaggag cacactgtag acagctgcat cagtgacatg       660
aaaacagaaa ccagggaggt cctgaccca acgagcactt ctgacaatga gaccagagac       720
tcctcaatta ttgatccagg aactgagcaa gatcttcctt ccctgaaaa tagttctgtt       780
aaagaatacc gaatggaagt tccatcttcg ttttcagaag acatgtcaaa tatcaggtca       840
cagcatgcag aagaacagtc caacaatggt agatatgacg attgtaaaga atttaaagac       900
ctccactgtt ccaaggattc taccctagcc gaggaagaat ctgagttccc ttctacttct       960
atctctgcag ttctgtctga cttagctgac ttgagaagct gtgatggcca agctttgccc      1020
tcccaggacc ctgaggttgc tttatcctc agttgtggcc attccagagg actcttagt       1080
catatgcagc aacatgacat tttagatacc ctgtgtagga ccattgaatc tacaatccat      1140
gtcgtcacaa ggatatctgg caaaggaaac caagctgctt cttgacatta ggtgtagcat      1200
gtctacttt aagtccctca ccccccaacc ccatgctgtt tgtataagtt ttgcttattt      1260
gtttttgtgt ttcagttttgt ccagtgctct ctgcttgaat ggcaaggatag atttataggc      1320
ttaattcttg tcaggcaga actccagatg aaaaaaactt gcatcttcag tatacttcct      1380
aaagggcaat cagataatgg atatgtttta tgtaattaag agttcacttt agtggctttc      1440
atttaatatg gctgtctggg aagaacaggg ttgcctagcc ctgtacaatg taatttaaac      1500
ttacagcatt tttactgtgt atgatatggt gtcctctgtg ccagttttgt accttataga      1560
```

```
ggcagattgc ctccgatcgc tgtggttctt attatcaaaa ttaagtttac ttgtatacgg      1620
aacaaccaca agaaatttga ttctgtaaag aatcctcttt agctgtggcc tggcagtata      1680
taaatggtgc tttatttaac agaatacctg tggaggaaat aaagcacact tgatgtaaaa      1740
ataattgttt tattttatt gacatgactg attgattgct attctgtgca cttaattaaa       1800
ctgattgtga tgacttwwaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a               1851


<210> 63
<211> 3542
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1984)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3534)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3537)
<223> n equals a,t,g, or c

<400> 63
tccaatgctg atgagcgtct tcgctggcag gccagctcct tgcctgctga tgaccttttgc      60
acagaaaatg ccatcatgct gaaacgattc aataggtatc cgctgatcat tgacccctct      120
ggacaggcca cagaattcat tatgaatgaa tataaggwtc gtaagatcac acggaccagc      180
ttcctggatg acgccttcag aaagaactta gagagtgcac tgactgtcgg taaccccctt      240
ctggtccagg atgtggaaag ctacgatcca gttttgaacc cggtgctgaa ccgtgaagtg      300
cggcgaacag ggggagagt gctgatcact ctcggggacc aggacataga cctgtcgcca      360
tcgttgtca tcttcctgtc caccgggat ccaactgtcg agttcccacc agatctctgt       420
tcccgggtta cttttgtaaa cttcacagtt acccgtagca gtttacaaag ccagtgtcta      480
aatgaagtac ttaaagcaga aagacctgat gtggacgaga aacgatctga tcttcttaaa      540
cttcaagggg aatttcagct ccgtttgcgt cagctggaaa aatctctact acaagctctg      600
aacgaggtga aagggcgcat tttggatgac gacacgatca taaccactct ggagaacctg      660
aagagagagg ctgcagaggt caccaggaaa gttgaggaga cggacattgt catgcaggag      720
gtggagaccg tgtcccagca gtacctcccg ctctccaccg cctgcagcag catctacttc      780
accatggagt ccctcaagca gatacacttc ttgtaccagt actccctcca gttttttcctg      840
gacatttatc acaacgtcct atacgagaac ccgaaccga agggtgtcac cgaccacaca       900
cagcgcctgt ccattataac aaaggacctc ttccaggtgg cgtttaaccg agtggctcga      960
ggcatgctgc atcaggacca cattaccttt gccatgctgc tggcaagaat caaactgaag      1020
ggcaccgtgg gggagcccac ctacgatgca gaattccagc acttcttgag aggaaatgag      1080
attgtcctga gtgctggctc cacccccagg atccagggcc tgactgtgga gcaggcggag      1140
gcggtggtga ggctgagctg ccttcccgcg tttaaggact tgattgcaaa ggttcaggca      1200
gacgagcaat ttggcatctg gctggacagc agctcccggg agcagactgt gccctacctc      1260
tggagtgaag aaacctgc aacacccatt ggccaggcca tccaccgcct gctcctgatc       1320
caggcttttc ggcccgatcg cctgttggcc atggcccaca tgtttgtttc aacaaacctt      1380
ggggagtctt tcatgtccat catggagcag ccgctcgacc tgacccacat tgtggscaca      1440
gaggtgaagc ccaacactcc tgtcttaatg tgctctgtgc ctggttatga tgccagtgga      1500
catgtcgagg accttgcagc cgagcagaac acgcagatca cttcaattgc aatcggctct      1560
gcagaaggct ttaaccaagc agataaggca ataaacaccg ctgtaaagtc gggcaggtgg      1620
gtgatgctga agaatgtgca tctggcccca gggtggctga tgcagctgga gaagaagttg      1680
cattccctgc agccgcatgc ctgcttccga ctcttcctca ccatggagat caacccccaag      1740
gtgcctgtga atctgctccg tgcgggccgc atctttgtgt tcgagccacc gccagggktg      1800
```

```
aaggccaaca tgctgaggac gttcagcagc attcccgtct cacggatatg caagtctccc    1860
aacgagcgtg cccgcttgta cttcctgctg gcctggtttc atgcgatcat ccaagaacgc    1920
ttacgatacg caccactggg gtggtcaaag aagtatgaat ttggagagtc tgacctgcgg    1980
tcanyttgcg atacggtgga cacgtggctg gatgacacgg ccaagggcag gcagaacatc    2040
tcaccggata agatcccgtg gtctgcacta aagaccttaa tggcccagtc catttatggc    2100
gggcgcgtgg acaacgagtt tgaccagcgt ctgctcaaca ccttcctgga gcgcctgttc    2160
acaaccagga gtttcgacag tgagtttaag ctggcatgca aggtcgacgg acataaagac    2220
attcaaatgc cagatggcat gcaggcgaga ggagtttgtg cagtgggtgg agttgctccc    2280
cgacacccag acgccctcct ggctgggcct gcccaacaac gccgagagag tcctccttac    2340
cacacagggt gtggacatga tcagtaaaat gctgaagatg cagatgttgg aggatgagga    2400
cgacctggcc tacgcagaga ctgagaagaa gacgaggaca gactccacgt ccgacgggcg    2460
ccctgcctgg atgcggacac tgcacaccac cgcgtccaac tggctgcacc tcatccccca    2520
gacgctgagc cacctcaagc gcaccgtgga gaatatcaag gatcctttgt tcaggttctt    2580
tgagagagaa gtgaagatgg gcgcaaagct gcttcaggac gttcgccagg accttgcaga    2640
tgtcgtccag gtgtgcgaag gaaagaagaa gcagaccaac tacttgcgca cgctgatcaa    2700
cgagctagtg aaagggatct tgcctcggag ctggtcccac tacacggtgc ctgccggcat    2760
gaccgtcatc cagtgggtgt ccgacttcag cgagaggatc aaacagctgc agaacatctc    2820
actgcagct gcatctggtg gcgccaagga gctaaagaac atccacgtgt gcctgggtgg    2880
cctgttcgtg cctgaggcgt acatcactgc caccaggcag tatgtgggcc aggccaacag    2940
ctggtccctg gaggagctct gcctggaagt caacgtcacc acctcacagg gcgccaccct    3000
tgacgcttgc agcttcggag tcacgggtt gaaacttcaa ggggccacgt gcaacaacaa    3060
caagctgtca ctgtccaatg ccatctcaac cgcccttccc ctgacgcagc tgcgctgggt    3120
caagcagaca aacaccgaga agaaggccag tgtggtaacc ttacctgtct acctgaactt    3180
caccgtgca gacctcatct tcaccgtgga cttcgaaatt gctacaaagg aggatcctcg    3240
cagcttctac gagcgggggtg tcgcagtctt gtgcacagag taaactttttc tagctgcccc    3300
tttctgtaat agtgaaagtt ggtatttaac atttattcat ttttaaaata tttggaaggt    3360
ctgagcttgt gaaaagaaag tggttggtct gaggttggag gaagctgaat ggaatctgac    3420
ggttgggagt ggtggaaatt ggaaggatac caggaggtat ttgggaaggc caatggcgtg    3480
gctcctttga gaaataaaa cactaagcag gaaaaaaaa aaaaaactta caanccncaa    3540
gg                                                                   3542


<210> 64
<211> 883
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (832)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (858)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (871)
<223> n equals a,t,g, or c

<400> 64
aggtgatttt aatgataggt gtcatatata ggacggataa tctgtttaca ttctgttctt     60
ctcgatgcac tcacaagcgg gtaactaggt gacaagaaaa caaagatctt attcaaaaga    120
ggtcttacag caacccaacg tctcatcttc ccatgtaaa gatgacgggcg ccttgaggta    180
agctacaggc aacaccactt ccgcgtttct cttgcgccct ggtccaagat ggcggatgaa    240
gccacgcgac gtgttgtgtc tgagatcccg gtgctgaaga ctaacgccgg accccgagat    300
```

```
cgtgagttgt gggtgcagcg actgaaggag gaatatcagt cccttatccg gtatgtggag      360
aacaacaaga atgctgacaa cgattggttc cgactggagt ccaacaagga aggaactcgg      420
tggtttggaa aatgctggta tatccatgac ctcctgaaat atgagtttga catcgagttt      480
gacattccta tcacatatcc tactactgcc ccagaaattg cagttcctga gctggatgga      540
aagacagcaa agatgtacag gggtggcaaa atatgcctga cggatcattt caaacctttg      600
tggggcagg aatgtgccca aatttggact agctcatctc atggctctgg ggctgggtcc       660
atggstggca gtggaaatcc ctgatctgat tcagaaggc gtcatccaac acaaagagaa       720
atgcaaccaa tgaagaatca agccactgag gcagggcaga gggacctttg ataggctacg      780
atactawttt cctgtgcatc acacttaact catctaactg ttccccggac ancctccact      840
ctagttgtta ctaagtantg cagtagcatt ntggggaaga aca                        883
```

<210> 65
<211> 1541
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (760)
<223> n equals a,t,g, or c

<400> 65

```
ggcacgaggt ggcctctacc ctgggctcat ctggctacac aggactcta aacgcttcca       60
gattccctgg aaacatgcca cccggcatag ccctcaacaa gaagaggaaa ataccatttt      120
taaggcctgg gctgtagaga cagggaagta ccaggaaggg gtgggatgacc ctgacccagc     180
taaatggaag gcccagctgc gctgtgctct caataagagc agagaattca acctgatgta      240
tgatggcacc aaggaggtgc ccatgaaccc agtgaagata tatcaagtgt gtgacatccc      300
tcagccccag ggctcgatca ttaacccagg atccacaggg tctgctccct gggatgagaa      360
ggataatgat gtggatgaag aagatgagga agatgagctg gatcagtcgc agcaccatgt      420
tcccatccag gacaccttcc ccttcctgaa catcaatggt tctcccatgg cgccagccag      480
tgtgggcaat tgcagtgtgg gcaactgcag cccggagcca gtgtggccca aaactgaacc      540
cctggagatg gaagtacccc aggcacctat acagccttc tatagctctc cagaactgtg       600
gatcagctct ctcccaatga ctgacctgaa catcaagttt cagtaccgtg ggaaggagta     660
cgggcagacc atgaccgtga gcaaccctca gggctgccga ctcttcatg gggacctggg       720
tcccatgcct gaccaggagg agctctttgg tcccgtcagn ctggagcagg tcaaattccc      780
aggtcctgag catattacca atgagaagca gaagctgttc actagcaagc tgctggacgt      840
catggacaga ggactgatcc tggaggtcag cggtcatgcc atttatgcca tcaggctgtg      900
ccagtgcaag gtgtactggt ctgggccatg tgccccatca cttgttgctc ccaacctgat     960
tgagagacaa aagaaggtca agctattttg tctgtgaaaca ttccttaggcg atctcattgc    1020
ccaccagaaa ggacagatag agaagcagcc accgtttgag atctacttat gcttttgggga    1080
agaatggcca gatgggaaac cattggaaag gaaactcatc ttggttcagg tcattccagt     1140
agtggctcgg atgatctacg agatgttttc tggtgatttc acacgatcct ttgatagtgg     1200
cagtgtccgc ctgcagatct caacccagga catcaaggat aacatcgttg ctcagctgaa     1260
gcagctgtac cgcatccttc aaacccagga gagctggcag cccatgcagc ccacccccag     1320
catgcaactg cccctgccc tgcctcccca gtaattgtga atgccatctt cttccttctc      1380
tttttataa tattgtacat atggattttt ttattgttta gatttaacca gcttttaaat      1440
ctctgttttc tgtgacagtg ttagaagttc gtgattctcc aaatatgcct agatttaaag     1500
ctgatttaat ttatggaaaa aaaaaaaaaa aaaaaaaaa a                          1541
```

<210> 66
<211> 732
<212> DNA
<213> Homo sapiens

<400> 66

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agaaatgaa tgttagaagg tgcctgccga ggcgggacag agtgtttgct cgcgctggag        60
```

```
aaggctctgc tcagccctga gagtcccttc ctgccccacc gatactggca ctttaaaaag      120
gaagctgacc gcacagtgtc cagacgaatt ggcccccaga agatggggag ttctgtcctg      180
cccttctgtg tctgcgtgac ctcacccagc ctaggaggga ggtgcattca gggtagattt      240
gcctctcatt caaagttctg gggctttggg cggaaaacag ccagctttgg cgctgtgtggg     300
gagactcctc cagaccagga accccagaag gagacagagc ctgccacatc ctcccacgcc      360
aggccctggg ccagggtgat tggactgaga atttggccac aaccaaattg atgctggctg      420
gaaccagagg ccagaaagcc tggccttgtc cccatgtggg agccctgtcc tcagccctct      480
tgtccccttg agctcagtga attcccacca ggtgcccaca gctcctggac ttcaaattct      540
atatattgag agagttggag agtatatcag agatattttt ggaaaggagt tggtctatgc      600
aatgtcagtt tggaatcttc ttgaaagttt aatgtttttta ttaggagatt taaagaaaat    660
aaaggtctac aatatcaaaa aaaaaaaaaa aaaaaaaaa aaaaaaaaaa aaaaaaaaaa       720
aaaaaaaaaa aa                                                          732


<210> 67
<211> 631
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (575)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (626)
<223> n equals a,t,g, or c

<400> 67
ttaaggaatt cggcmcgaat cccggcaagt aacatgacta aaaagaagcg ggagaatctg       60
ggcgtcgctc tagagatcga tgggctagag gagaagctgt cccagtgtcg gagagacctg      120
gaggccgtga actccagact ccacagccgg gagctgagcc cagaggccag gaggtccctg      180
gagaaggaga aaaacagcct aatgaacaaa gcctccaact acgagaagga actgaagttt      240
cttcggcaag agaaccggaa gaacatgctg ctctctgtgg ccatctttat cctcctgacg      300
ctcgtctatg cctactggac catgtgagcc tggcacttcc ccacaaccag cacaggcttc      360
cacttggccc cttggtcagg catcaagcag cacttcaagc ctcaatagga ccaaggtgct      420
ggggtgttcc cctcccaacc tagtgttcaa gcatggcttc ctggcggccc aggccttgcc      480
tccctggcct gctgggggt tccgggtctc cagaaggaca tggtgctggt ccctccctta       540
gcccaaggga gaggcaataa agaacacaaa gctgnaaaaa aaaaaaaaaa aaaactcgta      600
ggggggggccc gtacccaatc gccctntcgt g                                    631


<210> 68
<211> 1751
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1665)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1741)
<223> n equals a,t,g, or c
```

```
<220>
<221> SITE
<222> (1748)
<223> n equals a,t,g, or c

<400> 68
ctgctagccg gccggcgcag gctgccgagc gggtgagcgc gcaggccagg ccaaagccct      60
ggtaccgcg cggtgcgggc ctcagtctgc gggcatgggg gcgtccgcgc ggctgctgcg     120
agcggtgatc atggggggccc cgggctcggg caagggcacc gtgtcgtcgc gcatcactac     180
acacttcgag ctgaagcacc tctccagccg ggacctgctc cgggacaaca tgctgcgggg     240
cacagaaatt gggcgtgttag ccaaggcttt cattgaccaa gggaaactca tcccagatga     300
tgtcatgact cggctggctcc ttcatgagct gaaaaatctc acccagtata gctggctgtt     360
ggatggtttt ccaaggacac ttccacaggc agaagcccta gatagagctt atcagatcga     420
cacagtgatt aacctgaaatg tgcccttttga ggtcattaaa caacgcctta ctgctcgctg     480
gattcatccc gccagtggcc gagtctataa cattgaattc aaccctccca aaactgtggg     540
cattgatgac ctgactgggg agcctctcat tcagcgtgag gatgataaac cagagacggt     600
tatcaagaga ctaaaggctt atgaagacca aacaaagcca gtcctggaat attaccagaa     660
aaaagggggtg ctggaaacat tctccggaac agaaaccaac aagatttggc cctatgtata     720
tgctttccta caaactaaag ttccacaaag aagccagaaa gcttcagttca ctccatgagg     780
agaaatgtgt gtaactatta atagtaagat gggcaaacct cctagtcctt gcatttagaa     840
gctgcttttc ctaagacttc tagtatgtat gaattctttg aaaattatat tactttattt     900
tctactgatt ttattttgga tactaaggat gtgccaaatg attcggatac taagatgcat     960
cgtttgaaat catctagtgt gttgtatgca gttatcctca aaaacatcag cgatgtctga    1020
acctttaaaa catctgttag agcaaaatta aaagagcatt tggtagtaat ctaacttttt    1080
gttcagttaa taagtggttg ataaagtttc catatttttc tggaaaagtt aaaaaaagtt    1140
acatgtcatt tggagaaaat acgtaatcag aaatttgtgc atagattgat gccaaaaaag    1200
acatttccag cattgtggaa catggtgaga cactatataa aattccagaa agaaagcaac    1260
tggatttaca gatttattgt gagacacaaa ttcactgctg cctttacact aagaaatgta    1320
tatgttaacc atatatgctg tatttatttt gtcgttaagc atactttcag tttactcaga    1380
attttcaattt tgctataaag atgtatcaat tagcatatag aaaaatatta ctttaagatg    1440
acttgtttcc tttgaaaata cctgtgtact gagggttatg atttgtgtca aaaattgaca    1500
taagtgcttt tacaaagcacc aaagttgaat gaattttcaa caaaatgtaa ttaaagtcta    1560
tgttttcagt tatgactcag gttaagaaat gtgttttagg atctacttgc tggttttttct    1620
ttttgatcca aatgtgtgat ctgccctgat aaataacaag ttatngtacc atctcccccg    1680
ccaataaaaa aaaaaaaaaa aaaaaaaaac tcgagggggg gcccggtacc caattctccg    1740
naataggnag t                                                         1751


<210> 69
<211> 508
<212> DNA
<213> Homo sapiens

<400> 69
ggcacgagat tatgtattaa aatgtttttg aattgtgaaa tattagaata ttgttactat      60
ttgacccaac tcaaaatctc catgggaaaa tacctgtcga tacccacagt attgttgaaa     120
ataatcagat gcagtatcac agctgtgtca gactctagta ccagttgggc aatcaaggca     180
cagctaaaaa ttgaaaacaa agatctggac aacaaaacga ccaaaggtgg gggtcaagca     240
gctctgacgt gtacctagct gtagaatgct atgcacacgt gccaggtgta gtgtgcatat     300
ccaggaaaaa ctgcagagag cccagtctt cacctctggt tgaccatgag ctctgtgtaa     360
gcaggaagtg aaggctaagg cagatttaag ctctgaaagc attccacaac atacacacaa     420
atcgtgcaaa gcattaagga aatcttgtta ctgctcaagtg ttgctgaccc aggaacaact     480
cctactcagc tggacttaaa aataaaaa                                        508


<210> 70
<211> 245
<212> DNA
```

<213> Homo sapiens

<220>
<221> SITE
<222> (241)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (243)
<223> n equals a,t,g, or c

<400> 70
```
tacatagagc aaagagaaat ttccagaatt tctaraattc tggaaagaga attttcctga      60
gattgcagat ttgcttgtgt cctcaggtga tgatgagggc tgtttttcccc tgttgtcctt     120
tcctcacact catgcttcct ctcctagagt gtctggttgg catgatcatg tgctacctag     180
gcatttcttt cactgataca aggaaaactg cagggttaaa aaaaaaaaaa aaaaaaaaaa     240
ncncg                                                                245
```

<210> 71
<211> 361
<212> DNA
<213> Homo sapiens

<400> 71
```
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cccaccagca ccagcaatac agctagctac ctgtggcctt ggatctcagc cagcatggct     120
gggagaggga gcagctgggc atgtaccta aatgctgtta ccagggaagg actcccagag      180
tgaagacaag taggacttc ctgcagaggt ggtacatgtg ctctctgtat ccatactttt      240
tttttttttt ttttgagata gagtttcacc cttgttgccc tggctggagt gcaatggtgc     300
gatctcagct cactgcaacc tctctgcctc ccgggttcaa gtgattctcc tgcctcagcc     360
t                                                                    361
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<210> 72
<211> 713
<212> DNA
<213> Homo sapiens

<400> 72
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aggatcacac aatagagaac actgtagtaa catttcggtc tgctcacaag acccagaaca      60
ttgatcagtt tttgttgttg gtttattatt tttctgttaa aaaattgtga aaagtttgtt     120
ttagctagat gatattttaa tagctgcgag tgctttggaa ctataaagat gtcactactt     180
aacacacata ccttatgtt tgttttgttt tgttttacac tcagtataaa tcaggagaag      240
ttagccaacc atctagcatt tagaatcctc tttttttattg tcttctaagg atatggatgt     300
tcccataaca gcaacaaaac agcaacaaaa acatttcata aatatcactt gatagactgt      360
aagcaacctgc ttaactttgt gtcccaaata tttagtgtgt atatatatat atatatatac     420
acacacacac acatatatat tcaacaaata aagcaaaata taacatgcat ttcacatttt     480
gtctttccct gttacgattt taatagcaga actgtatgac aagtttaggt gatcctagca      540
tatgttaaat tcaaattaat gtaaaacaga tcaacaacaa caaagaaact gtctatttga      600
gtgaagtcat gcttctcatt ataataactt ggcttcggtt atccatcaaa tgcacactta      660
tactgttatc tgattgttta taataaagaa tactgtgactt ataaaaaaaa aaa           713
```

<210> 73
<211> 862
<212> DNA

<213> Homo sapiens

<400> 73

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gaaagtcaga gctgtccaat ccctcagcac cttttagatt tgctccaaat tagaaacgtg      60
gggactatgt gttctgggca atcacaggtc tggaaaatgg ctctgcaggc tcttgatagt     120
gagacagtgg tcatcttacc agacatgcat ctgattttaa gcctcaggct aatccacaat     180
gctcggccat gcctatgatt aacaaacaaa agcaaaatct gcttttatag tttaggaaac     240
ctggatagaa cagtatttt cagcattctt ggataaagca gttctgcatt tttaaattgg      300
gactgcagaa gtgactgtct atagttgtga aatacaaaaa atggtatgtt tgatcagaaa     360
aggaagcccg tgcctggcac ttggaaagat actgagcatc ataaccctaa tgagaaaatg     420
taggctctgt gaatgttaac tacaaatcag gttaggaaag catatgacac cctttgtcaa     480
actaagcttc actaggagga cctgtgctca tagaagaata tgctttaaaa gtatcaattt     540
tccacagtcg atgatggaga aaagttcatt tgcaccagaa tgctgatagt cacaatacac     600
agcctgacat atataacaat acagtttttct gtaaacagaa gttcttcctc ttccaattca     660
ggagtcagtc agagcataaa tattgcatgt ttcactttag aaactgattc attttagaaa     720
gcagatctgg attatttgc agggtagaaa tgaaggctat ttctggcatt cttgctcaaa     780
aagtcaatat atgtacatta agtataaaaa agggtctctt tcacctcttt tgtttcgtag     840
cattggctac ataactcgtg cc                                              862
```

<210> 74
<211> 4602
<212> DNA
<213> Homo sapiens

<400> 74

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gcgagggggc gkggggagca gcgccgargc cgccgcctcc gcctccgccg cctaggacta      60
ggggtgggg gacggacaag ccccgatgcc gggggakacg gaagagccga gacccccgga     120
gcagcaggac caggaagggg gagaggcggc caaggcggct ccggaggacc cgcaacaacg     180
gcccctgag gcggtcgcgg cggcgcctgc agggaccact agcagcccgg tgctgagggg     240
aggtcgggac cgaggccggg ccgctgcgrc cgccgcgcmg cagctgtgtc ccgccggaga     300
aggccgagta tccccgcccg cgaggagcag cccagccgcc aggcctcccg acgtccccgg     360
gcagcagccc aggccgcgaa gtcccgtct ccagttcagg gcaagaagag tccgcgactc      420
ctatgcatag aaaaagtaac aactgataaa gatcccaagg aagaaaagga ggaagaagac     480
gattctgccc tccctcagga agtttccatt gctgcatcta gacctagccg gggctggcgt     540
agtagtagga catctgtttc tcgccatcgt gatacagaga acacccgaag ctctcggtcc     600
aagaccggtt cattgcagct catttgcaag tcagaaccaa atacagacca acttgattat     660
gatgttggag aagagcatca gtctccaggt ggcattagta gtgaagagga agaggaggag     720
gaagaagaga tgttaatcag tgaagaggaga ataccattca aagatgatcc aagagatgag     780
acctacaaac cccacttaga aagggaaacc ccaaagccac ggagaaaatc agggaaggta     840
aaagaagaga aggagaagaa ggaaattaaa gtggaagtag aggtggaggt gaaagaagag     900
gagaatgaaa ttagagagga tgaggaacct ccaaggaaga gaggaagaag acgaaaagat     960
gacaaaagtc cacgtttacc caaaaggaga aaaaagccct caatccagta tgtccgttgt    1020
gagatggaag gatgtggaac tgtcctttgcc catcctcgct atttgcagca ccacattaaa    1080
taccagcatt tgctgaagaa gaaatatgta tgtcccccatc cctcctgtgg acgactcttc    1140
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ctgaggtgct gattgcagaa gctctggctg ccaatgcagg cgccctcatc accagcacag    1500
atatcttggg cactaaccca gagtccctga cgcagccctc agatggtgag ggtcttcctc    1560
ttcttcctga gccctttggga aactcaacct ctggagagtg cctactgtta gaagctgaag    1620
ggatgtcaaa gtcatactgc agtgggacgg aacgggtgag ccctgagtgt gatgggaaga    1680
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tcggtgctac cacagaggtt ctgattgaag attcagactc tgccggacct agtggacagc    1800
gaaagacttgg ggcatgggac agctcagact ttgtatttaa aagtaaaaa ggacaaaaaa    1860
aaaatctaaa gcatttaaaa tctagtgaaa taactgaagg gcctgctctt tccattgtgg    1920
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atcacagcac acacatacat acaccctcca cctccccatc ccctgttctc cctctgttgc      1980
tccccttata aaattgatgt tgtctttacc agaaaggtag acaaaaaaga agcagcagca      2040
gctcttaaag tgagggttat tctcatactc ggttccagcc atcagcagac ttcctgctca      2100
tcggcagatc cccctttcca acctgtaact ctgatgtgct ctggatcagc ttttaacttt      2160
taatcatata ttactgtctt ctaaatccct tctcctcctc tactgctgcc ctatggttct      2220
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catagctctc cagtggcttt taaagaaagc tggtcctcag cactaacaaa atcactacaa      2340
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atgctctttg agatttttac agtgttgaaa cttaagaatt ttgagagggt gaggagggtt      2460
gttcagaatc taaattacag atagatgatt gtttcttgtg aatttgtttc ttttcctttt      2520
ttttttgtccc taccatttcc ttacatttcc cttggggccc atctctggct ccttgctttt      2580
tgtttcttgc tttgctttat cagttcattc cagctccctg ttagtgaagg acactgctgt      2640
tagtgaagga acaaagtcta tgagtcctaa aattttaagt caaagaaaac tgctctgttt      2700
cccctttagt aacacttctg aagaggaaaa acttcaatag ccaaagttaa taatcctata      2760
taataatttgc tttggctttc acctaaaatt ctgggcatca caatttcctt gggatagagg      2820
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gtcagaaatg catgatggct cttggaaaga atgacgtttt gctggaaaaa aaaaaaaraa      3060
cmgtttgtgt ttcacaaaca tggcttatca attttttcaa agaattcttt ttttcccaaaa      3120
agaggagtaa caaaatgtca tttctgaaag aggcttactt tataccaact agtgtcagca      3180
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tgtttctttt cagagtgttg cagatttgcc atttctccat aatatgggga tagaaaatgg      3300
aataaagata gaaggggatgt agaatatgct ttcctgccaa catggtttgg agtcgacttt      3360
ggtatattga ctagatttga aaatacaaga ttgattagat gaatctacaa aaaagttgtc      3420
ctcctctcag gtcccttttta cacttttttga ctaactagca tctatattcc acacttagct      3480
ttttttgtcac acttatcctt tgtctccgta aatttcattt gcagtggtta gtcatcagat      3540
attttagcca cctacacaaa agcaaactgc attttttaaaa atcttttctga gatgggagaa      3600
aatgtattct cctttcctat accgctctcc caacaaaaaa acaactagtt agttctacta      3660
attagaaact tgctgtactt tttctttttct tttaggggtc aaggaccctc tttatagcta      3720
ccatttgcct acaataaatt attgcagcag tttgcaatac taaaatattt ttatagact      3780
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tttttaatctt aaagttctac atttcatgct cttagtcaaa ttctgttacc tttttaataa      3960
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tctaactaag attattatag tctggttgtt tgaaatacca ttttttttctc cttttgtgtt      4320
tttcccactt tccaatgtac tcaagaaaat tgaacaaatg taatggatca atttaaaata      4380
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ggagagacag gtagttacct gaatataggt tgaaaaggtt atgtaaaaag aaattataat      4500
aaaagggata ctttgctttt caaatctttg ttttctctta ttctaggtaa ggcatattaa      4560
aaataaatat gtaaagaaga aaaaataaaag ttgtcttcat gg                        4602
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<210> 75
<211> 1255
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1227)
<223> n equals a,t,g, or c

<220>

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<221> SITE
<222> (1231)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1251)
<223> n equals a,t,g, or c

<400> 75
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cgttgccact ttcaaagtga tcccctgggg gagctcagcc tcatcctgat gatgctgcca     120
aggcgcactc tttatttttta tttttattttt attttttttt tagcatcctt ttggggcttc   180
actctccagag ccagttttta agggacacca gagccgcagc ctgctctgat tctatggctt    240
ggttgttact ataagagtaa ttgcctaact tgattttca tctctttaac caaacttgtg      300
gccaaaagat atttgaccgt ttccaaaatt cagattctgc ctctgcggat aaatatttgc     360
cacgaatgag taactcctgt caccactctg aaggtccaga cagaaggttt tgacacattc     420
ttagcactga actcctctgt gatctaggat gatctgttcc ccctctggat gaacatcctc     480
tgatgatcaa ggctcccagc aggctacttt gaagggaaca atcagatgca aaagctcttg     540
ggtgtttatt taaaatacta gtgtcacttt ctgagtaccc gccgcttcac aggctgagtc     600
caggcctgtg tgctttgtag agccagctgc ttgctcacag ccacatttcc atttgcatca    660
ttactgcctt cacctgcata gtcactcttt tgatgctggg gaaccaaaat ggtgatgata    720
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tgataaatct agaaaatgca ttcatacaat tacagaattc aaatattgca aaaggatgtg    840
tgtctttctc cccgagctcc cctgttcccc ttcattgaaa accaccacgg tgccatctct    900
tgtgtatgca gggctatgca cctgcaggca cgtgtgtatg cactccccgc ttgtgtttac    960
acaagctgtg gggtgttacg catgcctgct ttttttcactt aataatacag cttggagaga  1020
ttttgtatc acattataaa tcccactcgc tctttttgat ggccacataa taactactgc    1080
ataatatgga tacgccttat ttgatttaac tagttccta atgatggact tttaagttgt    1140
ttcctttttt tttcttttttt gctactgcaa acgatgctat aataaatgtc cttatcaaaa  1200
aaaaaaaaaa aaaaaaaaaa aaaaaanccc ngggggggggg cccgggaac ncaat         1255


<210> 76
<211> 475
<212> DNA
<213> Homo sapiens

<400> 76
ggcacgagag aaatgtttga ttctctttcc tattttaagg gatcttctct cttgttgatg      60
ttgaaaactt accttagtga agatgtgttt caacatgctg ttgtccttta cctgcataat     120
cacagctatg catctcattca aagtgatgat ctgtgggata gtttttaatga ggtcacaaac   180
caaacactag atgtaaagag aatgatgaaa acctggaccc tgcagaaagg atttcctttta   240
gtgactgttc aaaagaaagg aaaggaacctt tttatacaac aagagagatt cttttttaaat   300
atgaagcctg aaattcagcc ttcagataca aggtacatgc cctctttctt ttcatgccat    360
ctcttttgca ctctcaggtg gaaatatttt gaagtgtttt ataatcataa gttcttgtga    420
aacctaacaa gattatccct tcctaagaat acttaacctt cctaccaaat taaaa          475


<210> 77
<211> 465
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (458)
<223> n equals a,t,g, or c
```

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<220>
<221> SITE
<222> (462)
<223> n equals a,t,g, or c

<400> 77
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cagcggtgct gccatggcgt ggcggcggcg cgaaccrgcg tcggggctcg cggcgtgttg     120
gctctggcgt tgctcgccct ggccctgtgc gtgcccgggg cccggggccg ggctctcgag     180
tggttctcgg ccgtggtaaa catcgagtac gtggacccgc agaccaacct gacggtgtgg     240
agcgtctcgg agagtggccg cttcggcgac agctcgccca aggagggcgc gcatggcctg     300
gtgggcgtcc cgtgggcgcc cggcgagam ctcgarggct kcgcgcccga cacgcgcttc     360
ttcgtgcccg agcccggcgg ccgaggggcc gcgccctggg tcgccctggt ggtcgtgggg     420
gctgcacctt tcaaggacaa agtgctggtg gcggcgcnga angaa                     465
```

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<210> 78
<211> 1907
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1781)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1802)
<223> n equals a,t,g, or c

<400> 78
acatgcagcc caactcagga ttcttatgga attcctcaag gttgcaagaa gaaataagag      60
agagcaactg gaacagatcc agaaggagct aagtgtttg gaagaggata ttaagagagt     120
ggaagaaatg agtggcttat actctcctgt cagtgaggat agcacagtgc ctcaatttga     180
agctccttct ccatcacaca gtagtattat tgattccaca gaatacagcc aacctccagg     240
tttcagtggc agttctcaga caaagaaaca gccttggtat aatagcacgt tagcatcaag     300
acgaaaacga cttactgctc attttgaaga cttggagcag tgttacttt ctacaaggat     360
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gtccaagttt actcgatata attcagtacg acctttagcc acattgtcat atgctagtga     480
tctctataat ggttccagta tagtctctag tattgaattt gaccgggatt gtgactattt     540
tgcgattgct ggagttacaa agaagattaa agtctatgaa tatgacactg tcatccagga     600
tgcagtggat attcattacc ctgagaatga aatgacctgc aattcgaaaa tcagctgtat     660
cagttggagt agttaccata agaacctgtt agctagcagt gattatgaag gcactgttat     720
ttatgggat ggattcacag gacagaggtc aaaggtctat caggagcatg agaagaggtg     780
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aaaagtgaag ctgtggtcta ccaatctaga caactcagtg gcaagcattg aggcaaaggc     900
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agatcactgt gtccactact atgatcttcg taacactaaa cagccaatca tggtattcaa    1020
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ctcaacagac agtcagctaa aactgtggaa tgtagggaaa ccatactgcc tacgttcctt    1140
caagggtcat atcaatgaaa aaaactttgt aggcctggct tccaatggag attatatagc    1200
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gattgctgct aacagtcagg gtacaattaa ggtactagaa ttggtatgaa gggttaactc    1440
aagtcaaatt gtacttgatc ctgctgaaat acatctgcag ctgacaatga gagaagaaac    1500
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agaaaatgtc atgtgatgtc tctccccaaa gtcatcatgg gttttggatt tgttttgaat    1560
attttttct tttttttcttt tccctccttt atgacctttg ggacattggg aatacccagc    1620
caactctcca ccatcaatgt aactccatgg acattgctgc tcttggtggt gttatctaat    1680
ttttgtgata gggaaacaaa ttcttttgaa taaaaataaa taacaaaaca ataaaagttt    1740
attgagccac agttgagctt ggaaagtttt tgtcaaatgc ngcaagagat aactcttttt    1800
angaagtagc atatgtgaac tataatgtaa cagtgaataa tttgtaaagt tcgtatttcc    1860
caacctcttt gggaattaca catatcaata taaacaaaat ataaagt                  1907
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<210> 79
<211> 1168
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1148)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1149)
<223> n equals a,t,g, or c

<400> 79
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cccatgactg atgcttataa atttgtcaaa ggcaaacgac caattatctc cccaaacctt     120
aacttcatgg ggcagttgct agagttcgag gaagacctaa acaacggtgt gacaccgaga     180
atcctacac caaagtcgat gggcgtggaa acggttgtgt gacaatggtc tggatggaaa      240
ggattgctgc tctccattag gagacaatga ggaaggagga tggattctgg ttttttttct     300
ttctttttt ttttgtagtc gggagtaagt ttgtgaatgg aaacaaactt gtttaaacac      360
tttattttta acaagtgtaa gaagactata acttttgatg ccattgagat tcacctccca     420
caaactgaca aattaaggag gttaaagaag taattttttt aagccaacaa taaaaatata     480
atacaacttg tttctcccc tttttcctttt aagctatttg tagagtttat gactaaatag     540
tctgtgcagg ttcatagacc gaagatacta cacactttaa accaattaaa aagaaccaaa     600
agtaaataga aaagacattg aatcaccaag gcctgggatc aacctgggct gtccacacag     660
aaaacaaaaa cccaaccaaa ccaagccctg ttgtgctcac tggtgcaaag agaagatcag     720
ggcagcttaa gtggtctaag ratccttcag gcattcttta aggagaaaaa ggataccttt     780
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ttttttgaa atagtgagga actgaccatt atatgccttc actggcttct tgtgcaataa      900
tatgatgttt tagtgtgca aacaagttag agctggcagc tgaatgatag acaaatagtg      960
caaatttgcc agcttggaga tagaaaggaa ttcaacaata tatcaaatac tttccttccc    1020
accttttccc tttttttttt ttttttctga tttgattctg gttacagtgc cataaacctt    1080
gttacatatg tatatcagaa tgtaagaaaa aaaaatttat ttaaaaatat ttttcgcaaa    1140
aaaaaaanna aaaaactcga ggggggcc                                       1168
```

<210> 80
<211> 1285
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (561)
<223> n equals a,t,g, or c

<400> 80

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agaaaatcac atcctaacaa agaagtctgt ctaagacagt acatctcctg ttgaacttgc        60
atctttccac aggactttct gtttttaggg atgagactat tctctgcttc atcaaggaaa       120
gagaaatgtt caggggttgta gggatggcac acttattagt tctgcctgtc tgaaaggttc       180
ctgcaggaca gtttggtcag agctgcaatt cttagtccat ggtctaatgc ttgagtatct       240
cttctttccc tttcctgtct caggaatcag ctgagaattc attcgattgt catgcctcta       300
gcccttact gtgatttgtt ggttgcactt tcatttgctt tagttctaga atcacctgtt        360
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aattctgtgc tgcctgagcc ctagaatttt cccaccaacg aattattcca ggtagatcct       480
aagttgctgg atctagttga tatttaaaca atatctagtt gatatttctc attcagttgg       540
atccagaaac cagtatctct naaaaacaac ctctcatacc ttgtggacct aattttgtgt       600
gcgtgtgtgt gtgcgcgcat atgtatatag acaggcacat ctttttttact tttgtaaaag      660
cttatgcctc tttggtatct atatctgtga aagttttaat gatctgccat aatgtcttgg       720
ggacctttgt cttctgtgta aatggtacta gagaaaacac ctatattatg agtcaatcta       780
gttggtttta ttcgacatga aggaaatttc cagataacaa cactaacaaa ctctcccttg       840
actaggggga caaagaaaag caaaactgac cataaaaaac aattacctgg tgagaagttg       900
cataaacaga attaggtagt atattgaaga cagcatcatt aaacagttat gttgttctcc       960
ttgcaaaaaa catgtactga cttcccgttg agtaatgcca agttgttttt tttattataa      1020
aacttgccct tcattacatg tttcaaagtg gtgtggtggg ccaaaatatt gaaatgatgg      1080
aactgactga taaagctgta caaataagca gtgtgcctaa caagcaacac agtaatgttg      1140
acatgcttaa ttcacaaatg ctaatttcat tataaattgt tttgctaaaa tacactttga     1200
aactatttt ctgtattcca agagctgaga tcttagattt tatgtagtat taagtgaaaa      1260
aatacgaaaa taataaacat tgaag                                           1285
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<210> 81
<211> 1290
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1279)
<223> n equals a,t,g, or c

<400> 81
tctccagccc caatttctac gcgcaccgga agacggaggt cctctttcct tgcctaacgc       60
agccatggct cgtggtccca agaagcatct gaagcgggtg gagctgcgca agcattggat      120
gctggataaa ttgaccggtg tgtttgctcc tcgtccatcc accggtcccc acaagttgag      180
agagtgtctc ccctcatca ttttcctgag gaacagactt aagtatgccc tgacaggaga      240
tgaagtaaag aagatttgca tgcagcggtt cattaaaatc gatggcaagg tccgaactga      300
tataacctac ctgctggat tcatggatgt catcagcatt gacaagacgg gagagaattt      360
ccgtctgatc tatgcacaca agggtcgctt tgctgtacat cgtattacac ctgaggaggc      420
caagtacaag ttgtgcaaag tgagaaagat ctttgtgggc acaaaaggaa tccctcatct      480
ggtgactcat gatgcccgca ccatccgcta ccccgatccc ctcatcaagg tgaatgatac      540
cattcagatt gatttagaga ctggcaagat tactgatttc atcaagttcc attcacccag      600
ccaggtggtc tcgtcacctc agaggctccg cagactcctg cccaggccag gactgaggca      660
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gcagctactg cttttcctct gtgccaccca ctttggggag ccattagaaa aggtggccto      780
tgtggggaat tctagaccca caggccagca gctagaatcc ctgggcctcc tgccccsgg      840
ggagcagagc ctgccgtgca ccgagaggaa gccagctgct actgccaggc tgagccgtcg      900
ggggacctcg ctgtccccgc ccccgagag ctccgggagc cccagcagc cgggcctgtc       960
cgccccccac agccgccaga tccccgcacc ccagggcgcg gtgctggtgc agcgggagaa     1020
ggacctgccg aactacaact ggaactcctt cggcctgcgc ttcggcaagc gggagcggc      1080
accagggaac cacggcagaa gcgctgggcg gggctgaggg cgcaggtgcg gggcagtgaa     1140
cttcagaccc caaaggagtc agagcatgcg gggcgggggc gggggcggg gacgtagggc      1200
taaggagggg ggcgctggag cttccaaccc gaggcaataa aagaaatgtt gcgtaactca     1260
aaaaaaaaaa aaaaaaaanc tcggggggg                                       1290
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<210> 82
<211> 684
<212> DNA
<213> Homo sapiens

<400> 82
tttattgtat tctgtaacta tagaacttct atttwattct tttttggact tgctaagttg        60
tctttwatgg ttttwagttc catgctgaag ttttcagtat tgacttatcc ccttgaacat       120
gagttgtttt atagactctr atgattcaaa aatcttacat cttttggtag tctctttcat       180
ttgtycactg tttctgttga ttctwactca tggtatttta attcttcgtt wttttttttc       240
tgttwagawa cattctttga aaaataattt ggaggaatat ttgattctta tgaacaaggc       300
attactcacc agagaagatt ttttttgttyt accargtgcc targaatgct aacagtctgg       360
gamcacatag amcaccaggt gatgagacaa tcctgggart cctgttttac tttggsccat       420
cttttctccc aaccctgtgg gaatartcat ycatatccta rctgcaggct araaggtggt       480
ttatcagagc ccaacttga gggctctggg ctttagctac tgtcacccca tcataactga       540
gcttcatgga ttgattctct ttttatcttt cagattttct tttaaaaatc tttgttttt       600
tttttcttcc gaaagattcc cccaacatta ccattcccca ccttccgttg aatttttttg       660
gctctcattt tgaatttttc aaga                                              684

<210> 83
<211> 2024
<212> DNA
<213> Homo sapiens

<400> 83
ctgcaggaat tcggcacagc tgcgctggag gcttcatctt tgccgccgct gccgtcgcct        60
tcctgggatt ggagtctcga gctttcttcg ttggttcgyc ggcggggttcg cgcccttctc       120
gcgcctcggg gctgcgaggc tgggaaggg gttggaggg gctgttgatc gccgcgttta        180
agttgcgctc ggggcggcca tgtcggccgg cgaggtcgag cgcctagtgt cggagctgag        240
cggcgggacc ggagggatg aggaggaaga gtggctctat ggcgatgaaa atgaagttga        300
aaggccagaa gaagaaaatg ccagtgctaa tcctccatct ggaattgaag atgaaactgc       360
tgaaaatggt gtaccaaaac cgaaagtgac tgagaccgaa gatgatagtg atagtgacag       420
cgatgatgat gaagatgatg ttcatgtcac tataggagac attaaaacgg gagcaccaca       480
gtatgggagt tatggtacag cacctgtaaa tcttaacatc aagacagggg gaagagttta       540
tggaactaca gggacaaaag tcaaaggagt agacctttgat gcacctggaa gcattaatgg       600
agttccactc ttagaggtag atttggattc ttttgaagat aaaccatggc gtaaacctgg       660
tgctgatctt tctgattatt ttaattatgg gtttaatgaa gatacctgga aagcttactg       720
tgaaaaacaa aagaggatac gaatggggact tgaagttata ccagtaacct ctactacaaa       780
taaaattacg gtacagcagg gaagaactgg aaactcagag aaagaaactg cccttccatc       840
tacaaaagct gagtttactt ctcctccttc tttgttcaag actgggcttc caccgagcag       900
gagattacct ggggcaattg atgttatcgg tcagactata actatcagcc gagtagaagg       960
caggcgacgg gcaaatgaga acagcaacat acaggtcctt tctgaaagat ctgctactga      1020
agtagacaac aattttagca aaccacctcc gttttttccct ccaggagctc ctcccactca      1080
ccttccacct cctccatttc ttccaccttc tccgactgtc agcactgctc cacctctgat      1140
tccaccaccg ggttttcctc ctccaccagg cgctccacct ccatctctta taccaacaat      1200
agaaagtgga cattcctctg gttatgatag tcgttctgca cgtgcatttc catatggcaa      1260
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caagcagtgg gactattatg ccagaagaga gaaagaccga gatagagaga gagacagaga      1380
cagagagcga gaccgtgatc gggacagaga aagagaacgc accagagaga gagagaggga      1440
gcgtgatcac agtcctacac caagtgtttt caacagcgat gaagaacgat acagatacag      1500
ggaatatgca gaaagaggtt atgagcgtca cagagcaagt cgagaaaaag aagaacgaca      1560
tagagaaaga cgacacaggg agaaagagga aaccagacat aagtcttctc gaagtaatag      1620
tagacgtcgc catgaaagtg aagaaggaga tagtcacagg agacacaaac acaaaaaatc      1680
taaaagaagc aaagaaggaa aagacgggg cagtgagcct gcccctgaac aggagagcac      1740
cgaagctaca cctgcagaat aggcatggtt ttggccttt gtgtatatta gtaccagaag      1800
tagatactat aaatcttgtt attttctgg ataatgttta agaaatttac cttaaatctt      1860
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gttctgtttg ttagtatgaa aagttaactt tttttccaaa ataaaagagt gaattttttca      1920
tgttaagtta aaaatctttg tcttgtacta tttcaaaaat aaaaagacag caatgactttt      1980
atatccaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggc ggcc                        2024


<210> 84
<211> 931
<212> DNA
<213> Homo sapiens

<400> 84
cgcgccmata gccggacggg gatctgagct ggcaggatga atgtgggggt ggcacacagc         60
gaagtaaacc ccaacacccg agtgatgaat agccgaggca tctggctggc ctacatcatc        120
ttggtaggat tgctgcatat ggttctactc agcatcccct tcttcagcat tcctgttgtc        180
tggaccctga ccaacgtcat ccataacctg gctacgtatg tcttccttca tacggtgaaa        240
gggacaccct ttgagactcc tgaccaagga aaggctcggc tactgacaca ctgggagcaa        300
atggactatg ggctccagtt tacctcttcc cgcaagttcc tcagcatctc tcctattgtg        360
ctctatctcc tggccagctt ctatacaag tatgatgctg cgcacttcct catcaacaca         420
gcctcattgc taagtgtact gctgccgaag ttgccccagt tccatggggt tcgtgtcttt        480
ggcatcaaca aatactgagg gatgggtttt gggacagctc catgggcatg gggaaggcac        540
tgaaacagag gactataaaa catccttctc ttattcttca tactgtcttc tacacctttta       600
aagcctgaga actatacaac ctttcccaga ctcccaagaa gagaagagat tggcaaatgg        660
ggctcctggg cccagtcctg ctagtggcaa gtttctttga atcaggaagg caggtgaggt        720
aagggccaaa tcactctcct ccatagcagg aagccatttg ggcagctcct ttggtgatta        780
catctttcca tatcttttac acttaccacc ttccagctct gttttgctgt gtattttttct      840
tacaataatt tttttcagct atagctgcag tttaatcagg atgggtagag agctgtcctc        900
ataaggctgg gggtgggaag atggaatact g                                       931


<210> 85
<211> 825
<212> DNA
<213> Homo sapiens

<400> 85
cggggccggc ggggtcttca gggtaccggg ctggttacag cagctctacc cctcacgacg         60
caaacatggc agcgcagaag gaccagcaga aagatgccga ggcggaaggg ctgagcggca        120
cgaccctgct gccgaagctg attccctccg gtgcaggccg ggagtggctg gagcggcgcc        180
gcgcgaccat ccggccctgg agcaccttcg tggaccagca gcgcttctca cggccccgca        240
acctgggaga gctgtgccaa cgcctcgtac gcaacgtgga gtactaccag agcaactatg        300
tgttcgtgtt cctgggcctc atcctgtact gtgtggtgac gtccctatg ttgctggtgg         360
ctctggctgt cttttttcggc gcctgttaca ttctctatct cgcgcaccttg gagtccaagc      420
ttgtgctctt tggccgagag gtgagcccag cgcatcagta tgctctggct ggaggcatct       480
ccttcccctt cttctggctg gctggtgcgg gctcggccgt cttctgggtg ctgggagcca       540
ccctggtggt catcggctcc cacgctgcct tccaccagat tgaggctgtg gacggggaggg      600
agctgcagat ggaaccggtg tgaggtgtct tctgggacct gccggcctcc cgggccagct       660
gccccacccc tgcccatgcc tgtcctgcac ggctctgctg ctcgggccca cagcgccgtc       720
ccatccacaag cccgggggagg gatcccgcct ttgaaaataa agctgttatg ggtgtcattc     780
aggaaaaaaa aaaaaaagg ggggcccctc tagggggtcaa agtta                       825


<210> 86
<211> 1238
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
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<222> (567)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (651)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1014)
<223> n equals a,t,g, or c

<400> 86
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gggacggttt ctggctctca ggctctgaga agctgcagtt tatgagtggc cctgtgtgtg       120
ctgccaccta ctggagaagc cataagctgc agctttagga aaagggaacc cggggcagag       180
tgtgggaaag tgggatggca gcatggcagg gctttggaaa atgagaggtg agagtktktc       240
caggaagggt gtaaggagag gatggatcct gatacatgga ttcaggatca ttagggtcct       300
gtctgggaca ctggccttcc tgcttacctg ctcttttctt cctccttggt cggaggaggg       360
gctggctcac tgctctggct tcatttttcca gagctgcctg ctgcagtcac acttaggtca       420
tcttctctca cttttctcct tttgccgatt agtggacgtg acagagatgt gaatggggca       480
gggatgtcct ttgatggcat caagacttta gcttctggtg cgctgtgtcc cagctctgat       540
ttcagttgca gccgtgatgg amagttngca tggaagctga gactctcact gacagtgaaa       600
ccctcaaatg aacacaatcc ctgctttcct gccaaggatc cttgtagggt nccccagct       660
tccccacttt tttctgtgt cctgacaaag aaacacagag taacttgatt gccctgtgac       720
ctggccagtt gcatttccc tgcaggcttg agcccaagcc agagccttga aaaggtattc       780
aggttgttgc ccaaaacact gaaaaaaact gccctggccc tgaaccaaat accttgaacc       840
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ctcactgtct gttgtgagga tacgctgtag cccactcatt aagtacattc tcctaataaa       960
tgctttggac tgatcaccct gccagtcttt tgtcttgggc aatctatact tttnctcaga      1020
ggttcccaag gcctactgaa gggacttaac atactcttaa tggctttcct ctctcttgtt      1080
ttacttatg ccctcacttc ctgagttaac ctcccaaata caggattcac ctgtacccaa      1140
gcccttagct tcaagaatac aggatcacct gtacccaagc ccttagctca agctctgctt      1200
tggaagaacc caaactaaga cagtgctcct ggtgccct                            1238


<210> 87
<211> 1460
<212> DNA
<213> Homo sapiens

<400> 87
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ctgctcctcc tgacccgggg cctggtgggg gtcggggagg ccagttattc caccatcgcg       120
cccactctca ttgccgacct ctttgtggcc gaccagcgcg accggatgct cagcatcttc       180
tactttgcca ttccggtggg cagtggtctg ggctacattg caggctccaa agtgaaggat       240
atggctggag actggcactg ggctctgagg gtgacaccgg gtgctaggagt ggtggccgtt       300
ctgctgctgt tcctggtagt gcgggagccg ccaaggggag ccgtggagcg ccactcagat       360
ttgccacccc tgaaccccac ctcgtggtgg gcagatctga gggctctggc aagaaatcct       420
agtttcgtcc tgtcttccct gggcttcact gctgtggcct ttgtcacggg ctccctggct       480
ctgtgggctc cggcattcct gctgcgttcc cgcgtggtcc ttggggagac cccaccctgc       540
cttccggag actcctgctc ttcctctgac agtctcatct ttggactcat cacctgcctg       600
accggagtcc tgggtgtggg cctgggtgtg gagatcagcc gccggctccg ccactccaac       660
ccccgggctg atcccctggt ctgtgccact ggcctcctgg gctctgcacc cttcctcttc       720
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gagaccctcc tgtccatgaa ctgggccatc gtggccgaca ttctgcgtgt atcggtgatc       840
cctacccgac gctccaccgc cgaggccttc cagatcgtgc tgtcccacct gctgggtgat       900
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gctgggagcc cctacctcat tggcctgatc tctgaccgcc tgcgccggaa ctggccccccc        960
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gcactgggcg gcgcacttcc tgggcaccgc catcttcatt gaggccgacc gccggccgggc       1080
acagctgcac gtgcagggcc tgctgcacga agcagggtcc acagacgacc ggattgttggt      1140
gccccagcgg ggccgctcca cccgcgtgcc cgtggccagt gtgctcatct ggagagggctg       1200
ccgctcacct acctgcacat ctgccacagc tggccctggg cccaccccac gaagggcctg       1260
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cagacactac atgggtagct caggggagga ggtggggggtc caggaggggg atccctctcc       1380
aacagggca gccccaaggg ctcggtgcta tttgtaacgg gattaaaatt tgtagccaga       1440
aaaaaaaaa aaaaaaaaaa                                                    1460


        <210> 88
        <211> 1395
        <212> DNA
        <213> Homo sapiens

        <220>
        <221> SITE
        <222> (967)
        <223> n equals a,t,g, or c

        <400> 88
caggtgcaaa gtgggaagtg tgagtcctca gtcttgggct attcggccac gtgcctgccg        60
gacatgggac gctggagggt cagcagcgtg gagtcctggc cttttgcgtc cacgggtggg       120
aaattggcca ttgcacggc gggaactggg actcaggctg cccccccggcc gtttctcatc       180
cgtccaccgg aytcgtgggc gctcgcactg gcgctgatgt agtttcctga cctctgaccc       240
gtattgtctc cagattaaag gtacgacatt tggaggcccc agcgagaaac gtcaccggga       300
gaaacgtcac cgggcgagag cggkcccgct gtgtgctccc ccggaaggac agccagcttg       360
tagggggag tgccacctga aaaaaaatt tccaggtccc caaagggtga ccgtcttccg       420
gagacagcgg atcgactacc atgtgggtgc ccacaaaaat tycacctytg agtcctcaac       480
tgctgacccc ggggtcagtt ccagagagaa ggactccctc ctgcttggaa gagacctcac       540
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tcccgcatca aaaaggccaa crgagcccaa ctagaaacat ctagaaacat ggctgggtca       660
ggccccttaa aactgcacct aagttgggtg aagccattag attaattctt tttcttaatt       720
ttgtaaaaca atgcatagct tctgtcaact tatgtatctt aagactcaat ataacccct       780
tgttataact gagggaatca atgatttgat tccccaaaaa cacaagtggg gaatgtagtg       840
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tctttcnact ggcagccgct cctycaagg acttaacttg tgcaagctga ctcccagcac       1020
atccaagaat gcaattaact gataagatac tgtggcaagc tatatccgca gttcccagga      1080
attcgtccaa ttgattacac ccmaaagccc cgcgtctatc accttgtaat aatcttaaag      1140
ccctgcacc tggaactatt aacgttcctg taaccattta tccttttaac ttttttgcct       1200
actttatttc tgtaaaattg ttttaactag accccccctc tcctttctaa accaaagtat      1260
aaaagcaaat ctagcccctt cttcaggccg agagaatttc gagcgttagc cgtctcttgg      1320
ccaccagcta aataaacgga ttcttcatgt gtaaaaaaaa aaaaaaaaa ctcggagggg      1380
gggccggta cccaa                                                       1395


        <210> 89
        <211> 1186
        <212> DNA
        <213> Homo sapiens

        <220>
        <221> SITE
        <222> (54)
        <223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (55)
<223> n equals a,t,g, or c

<400> 89
ggcacgagcc ggcaagccga gctagggtga aaactggggg cgcaccagga tgtnngacag      60
aaaagcagaa gatgagactc tgttcattca cttttcctag gcccatcctg tggtcatctt     120
tcccctccc atcatacctc ctccttcctg gagcctctgc cggcttggct gtaatggtgg      180
cacttacctg gatatttcag tgggaggatg aaaggcgaga ctcaccctac gcggtgggac     240
agatggggag aggaaaaagg cagagatggc caggagaggg gtgcaggaca aaccagagag     300
gttgggtcag gggaaaaggg tggggagaaa gaggggtgca ggccctgcag gccggttagc     360
cagcagctgc ggcctccccg ggcccttggc atccaacttc gcagacaggg taccagcctc     420
ctggtgtgta tcataggatt tgttcacata gtgttatgca tgatcttcgt aaggttaaga     480
agccgtggtg gtgcaccatg acatccaacc cgtatatata aagataaata tatatatata     540
tgtatgtaaa ttatggcacg agaaattata gcactgaggg ccctgctgcc ctgctggacc     600
aagcaaaact aagcctttg gtttgggtac.tatgtttcgt tttgttattt gtttgttttt     660
gtggcttgtc ttatgtcgtg atagcacaag tgccagtcgg attgctctgt attacagaat     720
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attttaggag gttgcccaat tttgtttctt caattttact ggttacttt ttgtacaaat     840
caatctcttt ctctcttct ctcctcccca cctctcaccc ttgccctctc catctccctc     900
tcccgccctc ccctcctccc tctggctccc cgtctccattt ctgtccactc cattctctct    960
ccctctctcc tgcctcctgc tgcccctcc ccagcccact tcccgagtt gtgcttgccg     1020
ctccttatct gttctagttc cgaagcagtt tcactcgaag ttgtgcagtc ctggttgcag    1080
ctttccgcat ggccttcgt ttcgtgtaga ttgacgcgtt tctttgtaat ttcagtgttt    1140
ctgacaagat ttaaaaaaaa aaaaggaaa aaaaaaaaa aaaaa                       1186


<210> 90
<211> 1321
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (547)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1723)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1754)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1794)
<223> n equals a,t,g, or c

<400> 90
aaaacatgct ttcagggcgt cccctatgta ttcgggggc ccacggacac tcaggctgga      60
katccgtcct cactgcgctc aagatggcct cagcagacac cagttaccca gctgaaagtc     120
acaatccctc ccagaagtct cccaacacta gtgctgacca gaggtggggc tctcaggcta     180
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ggagtttcac acacaatgac aggctgctgg gggacattgc aggacccctt ttcctytcct      240
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aaaaaaaaaa aaaaaaaaaa aaaaaattc ctgcgggccg cangcttttt ccctttgggt     1740
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<210> 91
<211> 862
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> n equals a,t,g, or c

<400> 91
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cttgttcatc ctccagatgt agctattgat gtacacttcg caacggagtg tctgaaattg      780
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<210> 92
<211> 696
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (626)
<223> n equals a,t,g, or c

<400> 92
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ttccaggaca tctccatgga gatccccaa gaatttcaga agactgtatc caccatgtac       600
tacctctgga tgtgcagcac gstgntctt ctcctgaayt tcmtcgsctg cctggccagt       660
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<210> 93
<211> 1886
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (829)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1123)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1886)
<223> n equals a,t,g, or c

<400> 93
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gtagcagcct caagagtgga gcaggcactg tcggaagtgg cttcgtctct gcagagcatg     600
cccctaagca gggcccgctg cacccctgga tgacgctggc acagatctgg ctccatgcag     660
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ccactttggc ccagaaacca aatgtgaact tcctgtctcc cacctcagca ctagtccatg      1560
ccaggacacc agctgacaat ttcttggttt tactgtcaat aattgtacca tgtgatcaat       1620
tactgtcctc acttagaaca aagcctgagt ccgagaatat ttatattttta ccaatatatg      1680
cctgtacaaa gagaaggaaa tatgagttat ttaagttaa cttttttatg tgaattcaga       1740
gtttatttat cgagggaaat atgtacaaag aagcttcaaa tggaatattt accgacattc      1800
cttatacatg acagacactt ggctacatgg gaagatgatg ttaataataa aatgattttt     1860
aaatggaaaa aaaaaaaaa aaaan                                           1886
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<210> 94
<211> 1774
<212> DNA
<213> Homo sapiens

<400> 94

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agtgtaatta acattcctgt acatgtattt tgctacttgt gtgggtattt ctgtaggatg      240
aataactaga aatttattgg atcaggtttc acatttgcag ttttgaaaac tactaccaaa      300
aagatttcac caatttacaa ctccatcatt agtaagaatg cctgtttgcc tatagtctgc       360
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<210> 95
<211> 1779
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1731)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1748)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1754)
<223> n equals a,t,g, or c

<400> 95
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<210> 96
<211> 2801
<212> DNA
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<213> Homo sapiens

<220>
<221> SITE
<222> (2209)
<223> n equals a,t,g, or c

<400> 96

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<210> 97

<211> 1631
<212> DNA
<213> Homo sapiens

<400> 97
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ctcgtgaact acgaacggaa atctgcaa caaggctcat ctccaccacc tccacagtca  1260
tcccaagaat aaagtagttg tctcaacaac ttgaccttcc ccttacatg tccttttttg  1320
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taccctaaaa ccttggatta aacagaatgt gcattgtaca tctttaaaca aaatgtatat  1560
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ggtacccaaa t                                                       1631
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<210> 98
<211> 504
<212> DNA
<213> Homo sapiens

<400> 98
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tgcagacgcg atggataacg tgcagccgaa aataaaacat cgccccttct gcttcagtgt   180
gaaaggccac gtgaagatgc tgcggctgga tattatcaac tcactggtaa caacagtatt   240
catgctcatc gtatctgtgt tggcactgat accagaaacc acaacattga cagttggtgg   300
aggggtgttt gcacttgtga cagcagtatg ctgtcttgcc gacggggccc ttatttaccg   360
gaagcttctg ttcaatccca gcggtcctta ccagaaaaag cctgtgcatg aaaaaaaaga   420
agtttttgtaa ttttatatta cttttttagtt tgatactaag tattaaacat atttctgtat   480
tcttccaaaa aaaaaaaaa aaaa                                           504
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<210> 99
<211> 1416
<212> DNA
<213> Homo sapiens

<400> 99

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tgagtgagtg atagggtaac atgggccttc aggatgaccc cttggaactg tgccgagttc      180
cttaaatctc agctgggatc ctggacctgg gaggccctg tgagggccag ctctggaaaa      240
acctgggagt tgatgccgga gctgtggaag aactctgctc gagggcaggg tgccctggaa      300
cactggtagt tctggggctg ggagggagag gggctccggc tttctctgaa atgaacactg      360
ctcttcagca gttcaagtac ttgttctcaa aacattttct aattgattgg taggtttca       420
taagcattgt ttctttaagg catggaaagg gaagaatgct caagcaagtc atgtttgttt      480
tcagtgggat gggcccgcgt tctcactgct gggggcttcc ccttcatgtg gcacctttgt      540
gcaggggcca ccaggcagac tcttcccacc ttctcccact gaagcaccaa ggggcttgga      600
accgtaattt ggctaatcag aggcattttt tttgtcctag tatctttcac acttgtccaa      660
ccgtcttatt tttttaaaag ttctgttgct tgtattaaca cgaaactaga gagaaatagt      720
ttctgaagcc agtttattgt gaagatcccc aagggaggt tcggtagaga aaaatagtaa       780
gctggtttag aaactgacga gggcaaacag ccaggacgca ttggagagga atttgccaaa      840
gatctaccct gagataacgc ctgtccagtg tcttcaccac gtgaataacc agcgctccaa      900
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catgtgactt tagaatggaa ctgccggccc tggcaactgt cacgtgtgct agaaggttcg      1020
atgcctctgg aatgcatgtg atactcatct ccattttgtt tccttgattg cattttttgtt     1080
cttttagcag atctgtccct gtgggtggtg tctaagaagt cggacacctt ggttttgtg      1140
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aaatatattg ctacttgaaa aaaaaaaaa aaaaaa                                 1416
```

<210> 100
<211> 2847
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (382)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2146)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2820)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2821)
<223> n equals a,t,g, or c

<400> 100

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ttaattacaa ccaccaatca tatccaacaa aagtaccta aaagaaggac cagtggccac      120
tctcgaaaaa atttaagtat cagaagatta aaaagatttt aggatttgga agcttgtatt     180
gtctttcccc aataatcatt gtttgatctc caaatagtag ccttatatta gcaatrgaca     240
gatcattggt tctccatatc tgatcatatg ttactacttt ggaatcagta tttgggcaaa     300
ttcaagcatt tatgcagtgg atataaatgg aaatataaaa atatttgcca acctgtctca     360
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gtaacttatc atatctctgt gnatcctcaa ggaaagcact tttgctttta cttagaaagc    420
gtttcagatt tgctttatag actcctgctg tcttcagtac ctgataaaac tttaaccagg    480
gaagcattaa acacagtgca gcagcttttg cccaggcttc taagttcctg ccggcagcat    540
ttatcaatgt aagaactagg atgcttcctg cagtggcact accttccct agagctggag    600
catgctgctt ggccttaagc cccagcatga tgaggcttcc ctcctgccag gtcagtaaaa    660
gttagagagc tcagaattgg gtcttgcctg ggtgcaggtg gcagggtttg ctgaaacccc    720
taaagagaag tcaccaaggg aggcaggtaa tgaatgtttc cagaatcagt ckgatactca    780
tagcaatttc tggctatctt tcaaatgttg aatttctgga tgctgagagg gactttgatt    840
tgatatcatt aaatccagga cagtcccaag aagtgcttgg agtctcggct ctgacagccc    900
aagaaggggaa ataacttgta ttaaggaaca acatatgagc aggccctgag ctgtctctta    960
gataataaaa cagatgggga gtgggaagagt catttgcttc aagttataca gctaggaaat   1020
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tgaccatccc aatttatgaa tcttcttcaa aatgacattt cacagttata gttagggctc   1200
agaaatggca ttgaggtagc cttatttctc ccctttagca gatgctttaa gtacacattg   1260
ctgacttgag cccaccccca ggagttagga gaacatttcc tttttcatgc catcttccat   1320
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tcaaagtcca gtgaatctgg ctctcttact gattcctggt tttagtgtgt gtgtcgggg   1560
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catgtccaca cacacacaca caatatttga gagctaagga aaactcaaag cagccccttc   1680
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tgctgatcac atcagatttt tatgtttaaa aaaatctcat tatggnttga gtccagccca   2160
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acactgcatg aatggggaga accaatgaat ccattgtcct ctgcctattt tcctgtgcac   2580
agtcacattc cctccttagg aatcttcccc ttccacccttt tacattaaac aagggaacac   2640
tgaatcttt aagggaatta cacgtttggg ttaatgtttc gatatatcat tttcatactg   2700
taaattattt tgtaagagag atttactgct atcccaggat gttcggactt ggtgcccctg   2760
tgcatttgga aatcaataaa ctattactgg aaatgccaaa aaaaaaaaaa aaaaaaaan   2820
naaaaaactc gaggggggcc cgtaccc                                      2847
```

<210> 101
<211> 1394
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (901)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (904)
<223> n equals a,t,g, or c

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<220>
<221> SITE
<222> (1358)
<223> n equals a,t,g, or c

<400> 101
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cccccagaaa aaggtatgga gctaactcat ctcttttaca aggggtggcc atgacttact     120
gttgcaaagt actcagtgta tatttaatgt tgactgcttga attttagtta cgagagggaa    180
gaacaatttt acttctgtcc ttatttcact tgctgaaaag ctgtgggaca aaatgtatgg     240
aatagacaag gccactttct ttgtgatttc tgcttttcat gcatactatt ttatttaccc     300
ataatttcca agaggtttgg cgttccgctc tcctgctttt ttctttcatc cacccctttc     360
cttttttgg aaggggggtta tatatgagag ttcattgaag aagtccagtg aggctgaagt     420
aaaggggcaa gatagggcag ttaactaaag agcactttat ttcttttgaag cctttctaag    480
ttgaagtatg acataatatt tcccattggg gaaaggagaa tttctcttag agggtggcaa     540
aatgcctttg cccagtgtcc ctatttagg catcttttcc ttccttattc cttccagtca     600
gggtgtgtcc tatacaaac ttcccatcag ttctcctcaa tattccccat ttgtaaatga       660
tcacttctct tttctaaacc cttttcctgt tcagatccat acaggatttg caagggtagg     720
atcatacatg caaatgcccc ttgttcatct gtgtcttctg caaactagtc tcatgaagaa     780
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ntcnctgaga ctccagctcc cttccaccaa gcccagtctt gctacgtggc acagggcaaa     900
cctgactccc tttgggcctc agtttcccct ccccttcatg aaatgaaaag aatactactt     960
tttctttgttg gtctagcatt gctggacaca aagtgtagtc attattgttg tattgggtga   1020
tgtgtgcaaa actgcagaag ctcactgcct ataagaggaa ataagagaga aagtggagga   1080
gagggacaaa aggagtaatt atttcgtata gatccaccca tcccaacctt tctctcctca    1140
gtcccctgctc ctcatgtttc tggtttggtg agtccttttgt gccaccaccc ataatgcttt  1200
gcattgctgc atcctgggaa gggggtatat ggtctcacaa gttgttgtca ttgtttttttt   1260
gcatgcttttc ttaataaaaa aaaaaaaaaa atgtttttanag ttttatcttta aaaaaaaaaa 1320
aaaaaaaaaa accc                                                      1394
```

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<210> 102
<211> 794
<212> DNA
<213> Homo sapiens

<400> 102
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ccctctctcc cgccccgtat ctcttttcac ccttctccca ccctcgctcg cgtaccatgg    120
cggagcgtcg gcggccactc agtcccattc catctcctcg tcgtccttcg gagccgagcc    180
gtccgcgccc ggcggccggcg ggagcccagg agcctgcccc gcctggggga cgaagagctg    240
cagctcctcc tgtgcggtgc acgatctgat tttctggaga gatgtgaaga agactgggtt    300
tgtctttgga cacgctgatc atgctgcttt ccctggcagc tttcagtgtc atcartgtgg    360
gtttcttamc tcatcctggc tcttctctct gtcaccatca rcttcaggat ctacaagtcc   420
gtcatccaag ctgtwcagaa rtcagaaraa ggccatccaw tccaaagcct acctggacgt    480
agacattact ctgtcctcag aagctttcca taattacatg aatgctgcca tggtgcacat    540
caacagggcc ctgaaactca ttattcgtct ctttctggta gaagatctgg ttgactcctt    600
gaagctggct gtcttcatgt ggctgatgac ctatgttggt gctgtttta acggaatcac    660
ccttctaatt cttgctgaac tgctcattttt cagtgtcccg attgtctatg agaagtacaa    720
gacccagatt gatcactatg ttggcatcgc ccgagatcag accaagtcaa ttgttgaaaa    780
gatcccaagc aaaa                                                      794
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<210> 103
<211> 1544
<212> DNA
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<213> Homo sapiens

<220>
<221> SITE
<222> (1534)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1536)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1537)
<223> n equals a,t,g, or c

<400> 103

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ctgggtggaa agaagtatac ctttccctgg ggccctagga tagcaaagtg agccatagtg     180
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tttgagcctt agccatctcc tgtcaggtag gaatgaactt gccagccttc aggytcgttc     300
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ctcccacagg gaggacggag ctggcctcag gagtgggaca cccagacttg gcagggcctt     480
caagaggcct gtgtgggggc cccaggaatc cttagctgaa gcgggagac tcactctcca       540
tctcaggaaa ttctagccct tgccctcagg gagccacggt tgagggtgag gcccaacacc     600
tgccttaggg ccctgggtgg gcaagtctgg gccctggggt agggagggag actcaggccc     660
acacttgggt attttctaat ttcagacaaa cacacactca gcgcgcactc actgattcct     720
acacattgcc aagatttcac acatgtgacc agggccacc aaagtccctg tgacctttgt       780
gactaggatc ctaatttctc tattttctcc tgggtgcctg ggtctgtgtc acctggggca     840
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gactttccca catgataaaa gaaaagggag gtacagaagt tccaattccc tttttatttt    1320
gctggttggt atctgtaaat gtttaataaa tatctgagca tgtatctatc aacgccaaga    1380
atttcaaagt ctccttcaac aatatgaggc ttttaggatg tttatattcc ttcatccctc    1440
ttgtttccca ggttttgcag ggaaaaaaag tctggaatta tagatacagc ttattattaa    1500
atttgttctt gcataaaaaa aaaaaaaaaa aacncnnggg gggg                      1544
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<210> 104
<211> 871
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> n equals a,t,g, or c

<220>
<221> SITE

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<222> (676)
<223> n equals a,t,g, or c

<400> 104
acccacgcgt ccgncttgtc cacccggggg cgtgggagtg aggtaccaga ttcagcccat      60
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aggtgggtcg ctgtccaccc gggggcgtgg gagtgaggta ccagattcag cccatttggc     180
cccgacgcct ctgttctcgg aatccgggtg ctgcggattg aggtcccggt tcctaacgga     240
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tggccactgt caacgcccgc tggctggaac cccgcaccac agctgccatg tgggccctgc     600
aaaccgtggg agaaggagcg aggcctgggt ggggaggtac caggcagcca acaggttccc     660
gatccttaac gccagntgcg agagaaggac cccaagtaca gtgctctccg ccagaatttc     720
ttccgctacc atgggctgtc ctctctttgc aatctgggct gcgtcctgag caatgggctc     780
tgtctcgctg gccttgccct ggaaataagg agcctctagc atgggccctg catgctaata     840
aatgcttctt cagaaaaaaa aaaaaaaaa a                                     871


<210> 105
<211> 404
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (366)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (371)
<223> n equals a,t,g, or c

<400> 105
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ttagaacaaa acagtgcaac cgtagagcct tcttcccatg aaattttgca tctgctccaa     120
aactgctttg agttactcag aacttcaacc tcccaatgca ctgaaggcat tccttgtcaa     180
agataccaga atgggttaca catttaacct ggcaaacatt gaagaactct taatgttttc     240
tttttaataa gaatgacgcc ccactttggg gactaaaaat gtgctattgc cgagaagcag     300
tctaaaattt atttttttaa aaagagaaac tgccccatta ttttggtggg gttggttttt     360
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<210> 106
<211> 1542
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1477)
<223> n equals a,t,g, or c

<400> 106
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gctgcccgt gcacttcagc aaaatggagc tccaggtatt gccaaggtca aggccaactg         960
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ggggctaaaa gggctgtaca gttatttccc cctccctgcc ttaaaacttg ggagaggagc       1260
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aataatgtca ctgtggaccc agtctcactc ctccaccca cacactgaag cagtagcttc        1380
tgggccaaag gtcagggtgg gcggggggcct gggaatacag cctgtggagg ctgcttactc     1440
aacttgtgtc ttaattaaaa gtgacagagg aaaccanaaa aaaaaaaaaa aaaactcga        1500
gggggggccg tacccaaatc gccggtatga tcgtaaacaa tc                         1542
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ggtagctcan tgcagtgaaa tagtcttact ggaaacaaag ccctttatca agaataatta        60
actcttccct tttcttttttg gagaggtgct ttgttctga tcggaccatt tcactgcagc       120
aagcaacaca gtattctrag cagaagatcg ggacttgagg ccatgttgcg gagggccagt       180
racattatct ggactctgga gtgtgaggaa tatggactcc actcttcact atattcacar       240
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gtagaaattg gcggtttcga gctgaactgg ctgaacagct gattttactt ctagagttat       780
atagtcccag agatgtttat gactatttac gtcccattgc tctgaatctg tgtgcagaca       840
aagtttcttc tgttcgttgg atttcctaca agttggtcag cgagatggtg aagaagctgc       900
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gaccactctt gggagtgctg cagtctttaa tcatgctgtt taaactgttg tggcacaagt   2160
tctcttgtcc aaaataaaat tattaataag atctatagag agagatatat acacttttga   2220
ttgttttcta gatgtctacc aataaatgca atttgtgacc tgtaaaaaaa aaawaaaaaa   2280
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<210> 108
<211> 1062
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (605)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1031)
<223> n equals a,t,g, or c

<400> 108
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acacaagagg tggcgaaggt ccagctgtag ttcctctgga cgttctcgaa gatgctcttc   180
ctcttcttcg tcatcatctt cctcttcgtc ttcctcatcc tcatcatcca gttctcgaag   240
ccgctcacga atccccatcc ccccgccgga graagtgaca ccaggaggcc gtacagctct   300
tatcgttcac atgaccatta ccaaaggcaa agagtgctac aaaaagagcg tgcaatagaa   360
gaaagaaggg tggtcttcat tggaaagata cctggccgca tgactcgatc agagctgaaa   420
cagaggttct ccgtttttgg agagattgag gagtgcacca tccacttccg tgtccaaggg   480
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ggccacaagc tgcggcaggc agatgagcag ccctttgatc tctgctttgg gggccgaagg   600
swgtnctgca agaggagcta ttctgatctt gactccaacc gggaagactt tgacccagca   660
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aacctcctcc acccccttcc cctactctag gggagagagc ttgctagtgag atgactgttt      840
tataaagaaa tggaaaaaag tgaaataaaa aatatgttga atcagatttt ttaaaagggg      900
tatttgtttt tttataacag gtattgaaac aagttaactt gcattcctat gtaagatagg      960
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aactagagag naaaaaaaaa aaaaaaaaaa atttaaaaaa ct                        1062


<210> 109
<211> 2539
<212> DNA
<213> Homo sapiens

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aggcttcctg ccttatgaag ccgatgcaga aattttggct gtgaaatttc acactatgat      180
aactgagaag tggggattaa acatggagta ttgtcgtggc caggcttaca ttgwctctag      240
tggattttct tccaaaatga aagttgttgc ttctagactt tyaagmkmra twkccccmak      300
ywawckgaac amamkctgsw cytccwsygc sktrrmkryc gykstatrrc warwksakym      360
ccygkkmtgs rrgtawytsk tgcaykaggg aacaattgag gaagtttgtt cttttttcca      420
tcgatcacca caactgcttt tagaacttga caacgtaatt tctgttcttt ttcagaacag      480
taaagaaagg ggtaaagaac tgaaggaaat ctgccattct cagtggacag gcaggcatga      540
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gmwwtyyymk rktygaymyw ygcgwmcgag aaaaagccgt aaggtgtatg tagaccactt     1620
aatcactaaa tatctttgcc tataggactc cattgaatac attagccatt gataatctac     1680
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gttaaaaatc tatactggac agttacaaga aattaccgga gaaaagcttg tgagctcacc     2040
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tccatgactc ttatatactg cctcatcttg atttataagc aaaaacctga aaatcctacaa    2340
aataagtgtt gtggtttatc tagaaaaata tggaaaatat tgctgttatt tttggtgaag     2400
aaaatcaatt ttgtatagtt tatttcaatc taaataaaat gtgaattttg ttwwattaaa     2460
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<211> 1751
<212> DNA
<213> Homo sapiens

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tttagaggcg tcattgtggc tcttcctgga aacagcagcc tggccctgc caatggctcg      180
gcgccctgtg ggagcttcga gcagctggag tactgggcca acaacttcga tgactttgcg      240
gctgccctgg tcactctgtg gaacttgatg gtggtgaaca actggcaggt gtttctggat      300
gcatatcggc gctactcagg ccgtggtcc aagatctatt ttgtattgctg gtggctggtg      360
tcgtctgtca tctgggtcaa cctgtttctg gccctgattc tggagaactt cctctcacaag      420
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aggctgagcc agcaccgtaa cctgtggctg tgcaggtgac gtccgggctg ccatcccagc      600
aggggcggca ggagagagag gctggcctaa cacaggtgcc catcatgcag gaggcggcca      660
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tgaggtcagg agatcgagac catcctggct aacagggtga aaccccgtct ctactaaaaa     1560
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aggcaggaga atggcgtgaa cccgggaagc ggagcttgca gtgagccgag attgcgccac     1680
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aaaaaaaaaa a                                                          1751


<210> 111
<211> 1117
<212> DNA
<213> Homo sapiens

<400> 111
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caaaggacct tgctaatatc tgtaagacgg cagctacagc aggcatcatt ggctgggtgt      180
atggggggaat accagctttt attcatgcta aacaacaata cattgagcag agccaggcag      240
aaattttatca taaccggttt gatgctgtgc aatctgcaca tcgtgctgcc acacgaggct      300
tcattcgtta tggctggcgc tggggttgga gaactgcagt gtttgtgact atattcaaaa      360
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caggagctgt cacgggaagt ctttttagga taaacgtagg cctggtggc ctggtggctg      480
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agtactctgg tgagactgtt caggaaagaa aacagaagga tgaaaggtgca ctccatgagc      600
taaaactgga agagtggaaa ggcagactac aagttactga gcacctccct gagaaaattg      660
aaagtagttt acaggaagat gaacctgaga atgatgctaa gaaaattgaa gcactgctaa      720
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gaattttaca gttaaaaaaa aaaaaaaaaa aaaaaaa                                1117
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<210> 112
<211> 1313
<212> DNA
<213> Homo sapiens

<400> 112
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tggtattttt ggtactgtct tccttcagca gtgcatactc ttttgcaaag ttctttggtt        660
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aatgcttttt ttgctatcag agattgtgta ctattttat ttttaataaa tgtatcttcc       1260
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<210> 113
<211> 1654
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (549)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (552)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1641)
<223> n equals a,t,g, or c

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<400> 113
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gattttattt cccaggatat ggtgttcatt ttatgatatt acgcaggatg atgtattgag      1560
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<210> 114
<211> 1171
<212> DNA
<213> Homo sapiens

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<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (69)
<223> n equals a,t,g, or c

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tctcttctgc tcttttatga atgttcagag aaccaatga ctgagacatt tcaccccaca       540
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aaaccttatc accatgctgg ctatccgggt gttagctgac caaaatgtca ttcctaatgt      960
ggctaatgtc acttgctatt accagccagc cccctatgta gcagatgcca actttagcaa     1020
ttactacatt gcacaggttc agccagtatt cacgtgccag caacagacct actccacttg     1080
gctaccctgc aattaagaat catttaaaaa tgtcctgtgg ggaagccatt tcagacaaga     1140
caggagagaa aaaaaaaaaa aaaaaaaaaa a                                    1171


<210> 115
<211> 842
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (834)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (839)
<223> n equals a,t,g, or c

<400> 115
ggtctgcgcc ggaagtgcat gagctgccga tgtggtgctt agtgattgcg gtttcggtcg       60
ctctcccgtg tttcccgggc tgggtatttg cctcgcacca tggcgcccaa gggcaaagtg      120
ggcacgagag ggaagaagca gatatttgaa gagaacagag agactctgaa gttctacctg      180
cggatcatac tggggggccaa tgccatttac tgccttgtga cgttggtctt cttttactca     240
tctgcctcat tttgggcctg gttggccctg ggctttagtc tggcagtgta tggggccagc      300
taccactcta tgagctcgat ggcacgagca gcgttctctg aggatggggc cctgatggat      360
ggtggcatgg acctcaacat ggagcagggc atggcagagc accttaagga tgtgatccta      420
ctgacagcca tcgtgcaggt gctcagctgc ttctctctct atgtctggtc cttctggctt      480
ctggctccag gccgggcgcct ttacctcctg tgggtgaatg tgctgggccc ctggttcact      540
gcagacagtg gcacccccagc accagagcac aatgagaaac ggcagcgccg acaggagcgg      600
cggcagatga agcggttata gccattgaca ttgtggccac aggccactgg ccctgggtgg      660
ctctgtcagg gtgcacagcc cctcatgcct ggagcaatga gggtctagtc caggggccaa      720
aagcagtctg aggtattggg tatacttata ctctataggg tcgttgaata aatggcttag      780
aatgtgaaaa aaaaaaaaaa aaaaaactg aggggggccc ggtacccaat ttcncctana      840
at                                                                    842


<210> 116
<211> 1640
<212> DNA
<213> Homo sapiens

<400> 116
ggcacgaggc ggcggcagcg gtggcggcgg cgcccccgg cgggagccgt tccctttccc        60
gtcggggagc gcggggycgg ggcccagggg accccgggcc acggagagcg ggaagaggat      120
ggattgcccg gccctccccc ccggatggaa gaaggaggaa gtgatccgaa aatctgggct      180
aagtgctggc aagagcgatg tctactactt cagtccaagt ggtaagaagt tcagaagcaa      240
gcctcagttg gcaaggtacc tgggaaatac tgttgatctc acagtgtttg acttcagaac      300
tggaaagatg atgcctagta aattacagaa gaacaaacag agactgcgaa acgatcctct      360
caatcaaaat aagggtaaac cagacttgaa atacaacatt gccaattaga caaacagcat      420
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caattttcaa acaaccggta acccaaagtc acaaatcatc ctagtaataa agtgaaatca      480
gacccacaac gaatgaatga acagccacgt cagcttttct gggagaagag gctacaagga      540
ctttagtgca tcagatgtaa cagaacaaat tataaaaacc atggaactac ccaaaggttc      600
tcaaggagtt ggtccagtag caatgatgag accctttttat ctgctgttgc cagtgctttg     660
cacacaagct ctgcgccaat cacagggcaa gtctccgctg ctgtggaaaa gaacctgctg      720
tttggcttaa cacatctcaa cccctctgca aagcttttat tgtcacagat gaagactcag      780
gaaacagaag agcgagtaca gcaagtacgc aagaaattgg aagaagcact gatggcagac      840
atcttgtcgc gagctgctga tacagaagag atggatattg aaatggacag tggagatgaa      900
gcctaagaat atgatcaggt aactttcgac cgactttccc caagagaaaa ttcctaggaa      960
attgaacaaa aatgtttcca ctggcttttg cctgtaagaa aaaaaatgta cccgagcaca     1020
tagagctttt taatagcact aaccaatgcc tttttagatg tattttttgat gtatatatct     1080
attattcaaa aaatcatgtt tattttgagt cctaggactt aaaattagtc tttttgtaata    1140
tcaagcagga ccctaagatg aagctgagct tttgatgcca ggtgcaatct actggaaatg     1200
tagcacttac gtaaaacatt tgtttcccc acagtttaa taagaacaga tcaggaattc       1260
taaataaaatt tcccagttaa agattattgt gacttcactg tatatataaca tattttttata   1320
ctttattgaa aggggacacc tgtacattct tccatcgtca ctgtaaagac aaataaatga     1380
ttatattcca cagaaaaaaa aaaaaaaaaw mwstygarrr gsrgcmcrsw aymmarwwcc      1440
ccwmrtwrgs mktcstmtka yttacattca actctgatcc cggggcctta ggtttgacat      1500
gggaggtggg aggaagatag cgcatatatt tgcagtatga actattgcct ctgggacgtt     1560
gtgaggaatt gtgctttcac cagaatttct aaggatttct ggcttaaata tcacctagcc     1620
tgtggtaatt ttttttccct                                                 1640
```

<210> 117
<211> 952
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (951)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (952)
<223> n equals a,t,g, or c

<400> 117
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tgaatttagn aaacactttg gaaaactcat aacctcatca gaaactgcct ttagccacac       60
tcctgaccct ctagatgagt aacaaaaaaa tgaaataagt tcttggaaat taagccatt       120
attttaattt gctattttt tcaatgttct aggtatcttt aaatttgtta ttgtggaatc      180
attttcctgc cagatacctt tatcaaaatt attggcctca tgagagctga agtaagtcag     240
ctttttggtg aactttagtg gacttctgtg agattgtagt tgtactttgt atctctaaat     300
ctaaagatag tttttttaaaa ctcccaaaga aaatctgctc tcctttctga tctaaaaact   360
catctttggg gtaaagagtt aagtgtccaa aggttgtcac agttcatgag gtcagaggga     420
gctagcctgg cacctggact ctgcccatcc acagctgaca gattccaaca gaagtgtatt    480
taaattctcc agtagacaat gctgggtaag ggagggggta gggtgggtt attaagatac     540
aggctgctgt attttacatt ggttgtgggg gaaggggagc ctggagaaaa caaagtcact    600
attccctttt ttgaaacagg aaaaaaaatt attttttgtt cagtaaaaat ggtagagaat    660
tccaatgtcc ctagccacaa gggaccagtt ccactgagaa gtgaacagtg ggaactcaaa    720
atttcagaaa cattgggga agggaaaatt ggctttctct taattggcag atgttccagt     780
ggggsggggg ggctctgttt ttgttgggat gtgttatgtt gtatgtacgc atatatggac    840
```

```
cggagtctgc tgagtttata aggttccaaa aatatggtaa aatcttggtt tttgttaatt        900
tatctcaata aaagcccact ggractccaa aaaaaaaaaa aaaaaaaaga nn               952
```

<210> 118
<211> 1256
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1222)
<223> n equals a,t,g, or c

<400> 118
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gacgtcatag gtaaacaggc tctgtatccg tggcagcggc cgtggcaggc tggctgggta         60
ccggctgtcg ctgacccagg agaagctgcc tgtctacatc agcctgggct gcagcgcgct        120
gccgccgcgg ggccggcagc tgaactatgt gctcttcagg gcgggcaccg tgttgcattc        180
atctttgtac cccagccatc tagcagtgtt ggcatgtagt aggcactcaa gaaatgtgtg        240
ttgaatgaac gatgcctgtg acaagcaagc ggactttatt ctttcctgac ccttgctcct        300
atgacacacc tcctcctgac tgccactgtc actccttcag agcagaactc ctctagggaa        360
cctggatggg aaacagccat ggccaaggac atcctggggtg aagcagggct acactttgat       420
gaactgaaca agctgagggt gttggaccca gaggttaccc agcagaccat agagctgaag        480
gaagagtgca aagactttgt ggacaaaatt ggccagtttc agaaaatagt tggtggttta        540
attgagcttg ttgatcaact tgcaaaagaa gcagaaaatg aaaagatgaa ggccatcggt        600
gctcggaact tgctcaaatc tatagcaaag cagagagaag ctcaacagca gcaacttcaa        660
gccctaatag cagaaaagaa aatgcagcta gaaaggtatc gggttgaata tgaagctttg        720
tgtaaagtag aagcagaaca aaatgaattt attgaccaat ttatttttca gaaatgaact        780
gaaaatttcg cttttatagt aggaaggcaa aacaaaaaaa agcctctcaa aaccaaaaaa        840
acctctgtag cattccagcg gcttgaccaa tgacctatgt cacaagaggt ggcgtgtaag        900
gaatgcagcc ccctgaagac agcactacaa gtctggggga gccagtttta acatcagtgc        960
acagctgctg ctggtggccc tgcagtgtac gttctcacct cttatgctta gttggaacta       1020
agcagtttgt aaacttttcat cctttttttt gtaaattcac aaagctttgg aaggagaagc      1080
aataaatttt tgtttttcaaa tggcttgatg tacctttttt cctgttgctc ttgaaatatg      1140
tttaactcct catgagagaa ccctggattc tctatcccct agtcccaaaa acaaaccagg       1200
cagtggtcag cagctacctt tnatttggat cacacacgtg agtcagacag taccac           1256
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<210> 119
<211> 1143
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1139)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1143)
<223> n equals a,t,g, or c

<400> 119
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ggccgtagca gccgggctgg tcctgctgcg agccggcggc ccggagtggg gcggcggcat         60
gtaccttcca cattgagtat tcagaaagaa gtgatctgaa ctctgaccat tctttatgga       120
tacattaagt caaatataag agtctgacta cttgacacac tggctcgagc aaacatgaac       180
gttggagttg cccacagtga agtgaatcca aatacccgtg tcatgaacag ccggggtatg       240
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tggctgacat atgcattggg agttggcttg cttcatattg tcttactcag cattcccttc      300
ttcagtgttc ctgctgcttg gactttaaca aatattatac ataatctggg gatgtacgta      360
tttttgcatg cagtgaaagg aacacctttc gaaactcctg accagggtaa agcaaggctc      420
ctaactcatt gggaacaact ggactatgga gtacagttta catcttcacg gaagtttttc      480
acaatttctc caataattct atattttctg gcaagtttct atacgaagta tgatccaact      540
cacttcatcc taaacacagc ttctctcctg agtgtactaa ttcccaaaat gccacaacta      600
catggtgttc ggatctttgg aattaataag tattgaaatg ttttgaaact gaaaaaaaat      660
tttacagcta ctgaatttct tataaggaag gagtggttag taaactgcac tgtttctstg      720
ataatgtgaa atgagaagta tttacattgg agggccaatg gctggtcctt caagtgctgt      780
tttgaagtgc agatttccat taaatgatgc ctctgtttaa tacacctggt acatttctga      840
agaggggctt tataagcagg ctgggcaggc ccagcttata agttaaaggg catcacagtg      900
agggtgtagt agataaattc aaggaaataa gagatttgta agaaactagg accagcttaa      960
cttataatga atgggcattg tgttaagaaa agaacatttc cagtcattca gctgtggtta     1020
tttaaagcag acttacatgt aaaccggaat cctctctata caagtttatt aaagattatt     1080
tttattaccg taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaana     1140
gan                                                                    1143


<210> 120
<211> 1782
<212> DNA
<213> Homo sapiens

<400> 120
caggcccgg cccccaccc acgtctgcgt tgctgcccg cctgggccrg gccccaaagg       60
caaggacaaa gcagctgtca gggaacctcc gccggagtcg aatttacgtg cagctgccgg      120
caaccacagg ttccaagatg gtttgcgggg gcttcgcgtg ttccaagaac tgcctgtgcg      180
ccctcaacct gctttacacc ttggttagtc tgctgctaat tggaattgct gcgtgggca       240
ttggcttcgg gctgatttcc agtctccgag tggtcggcgt ggtcattgca gtgggcatct      300
tcttgttcct gattgcttta gtgggtctga ttggagctgt aaaacatcat caggtgttgc      360
tattyttta tatgtgattatt ctgttcacttg tatttattgt tcagtttct gtatcttgcg      420
cttgtttagc cctgaaccag gagcaacagg gtcagcttct ggaggttggt tggaacaata      480
cggcaagtgc tcgaaatgac atccacagaa atctaaactg ctgtgggttc cgaagtgtta      540
acccaaatga cactctctg gctagctgtg ttaaaagtga ccactcgtgc tcgccatgtg      600
ctccaatcat aggagaatat gctggagagg ttttgagatt tgttggtggc attggcctgt      660
tdttcagttt tacagagatc ctgggtgttt ggctgaccta cagatacagg aaccagaaag      720
accccgcgc raatcctagt gcattccttt gatgagaaaa caaggaagat ttcctttcgt      780
attatgatct tgttcacttt ctgtaatttt ctgttaagct ccatttgcca gtttaaggaa      840
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ttctctacat gttttttttct ttccgttgct gaaaaatatt tgaaacttgt ggtctctgaa      960
gctcggtggc acctgggaat ttactgtatt cattgtcggg cactgtccac tgtggcctt      1020
cttagcattt ttacctgcag aaaaactttg tatggtacca ctgtgttggt tatatggtga     1080
atctgaacgt acatctcact ggtataatta tatgtagcac tgtgctgtgt agatagttcc     1140
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ggaaatccaa attcccaatt tttttttggtc tttttaggaa agatgtgttg tggtaaaaag     1260
tgttagtata aaaatgataa ttwacttkgta gtctttatg atwacaccaa tgtattctag     1320
aaatagttat gycytaggaa attgtggttt aattttgac ttttacaggt aagtgcaaaa     1380
gagaagtggt ttcatgaaat gttctaatgt ataataacat ttaccttcag cctccatcag     1440
aatggaacga gttttgagta atcaggaagt atatctatat gatcttgata ttgttttata     1500
ataatttgaa gtctaaaaga ctgcatttt aaacaagtta gtattaatgc gttggcccac     1560
gtagcaaaaa gatatttgat tatcttaaaa attgttaact accgttttca tgaaagttct     1620
cagtattgta acagcaacct gtyaaacta agcatatttg aatatgatct cccataattt     1680
gaaattgaaa tcgtattgtg tggctctgta tattctgtta aaaaattaaa ggacagaaac     1740
ctttctttgt gtatgcatgt ttgaattaaa agaaagtaat gg                       1782


<210> 121
<211> 610
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<212> DNA
<213> Homo sapiens

<400> 121
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tattattaaa aacatatgga tccccatgaa gccctactac accaaagttt accaggagat   120
ttggatagga atggggctga tgggcttcat cgtttataaa atccgggctg ctgataaaag   180
aagtaaggct ttgaaagctt cagcgcctgc tcctggtcat cacaaccaga tttacttgga   240
gtacatgtga aagaaaacgt cagtctgcct gtaaatttca gcaagccgtg ttagatgggg   300
agcgtggaac gtcactgtac acttgtataa gtaccgttta cttcatggca tgaataaatg   360
gatccgtgag atgcactgct acctggtact gctttcagtg tgttcccct cagccctccg   420
gcgtgtcagg catactctga gtagataatt tgtcatgcag cgcatgcaat cagaatctca   480
ctgagccacc catcattgtg aaataattac ctcagttgta caggacttgg tgatcaggat   540
ccaggcactc acttgtattc tactgctcaa taaacgttta ttaaacttga aaaaaaaaa   600
aaaaaaaaaa   610

<210> 122
<211> 526
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (496)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (501)
<223> n equals a,t,g, or c

<400> 122
ggtacgcctg caggtaccgg tccggaattc cgggtcgccc acgcgtcngg ccacgcgtcc   60
acccacgcgt ccgccacgc gtcggagccg agccggactg gtcaggatga tcacggacgt   120
gcagctcgcc atcttcgcca acatgctggg cgtgtcgctc ttcttgcttg tcgttctcta   180
tcactacgtg gccgtcaaca atcccaagaa gcaggaatga aagtggcgct ttctccgccc   240
cagggttcca ggacatagtc tgaggcaaga tggagggtat gaggggcctt cacacttcac   300
ttcatccctt ctacccatca caacatacaa agcaactaca cctggatttt tccaaacaac   360
tttattttcc tcagagtctt cctaatcct atggaacaag aagctgccac tgaatagggc   420
ccagtatagg ggcttgcttt tctactccct cccccaata taaaaatata gactttttaa   480
aaaaaaaaa aaaaanttcg nggggggscc ggtaccatc ccccta   526

<210> 123
<211> 2081
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1996)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2054)
<223> n equals a,t,g, or c

<400> 123

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tgtaccggtc cggaaattcc cgggtcgacc cacgtcgtcs gggggaacatg gcggctkcgg      60
agccggcggt ccttgcgctc cccaacagcg gcgccgggggg cgcggggggcg ccgtcgggca     120
cagtcccggt gctcttctgt ttctcagtct tcgcgcgacc ctcgtcggtg ccacacgggg      180
cgggctacga gctgctcatc cagaagttcc tcagcctgta cggcgaccag atcgacatgc      240
accgcaaatt cgtggtgcag ctgttcgccg aggagtgggg ccagtacgtg gacttgccca      300
agggcttcgc ggtragcgag cgctgcaagg tgcgcctcgt gccgytgcag atccagctca      360
ctaccctggg aaatcttaca ccttcaagca ctgtgttttt ctgctgtgat atgcaggaaa      420
ggttcagacc agccatcaag tattttgggg atattattag cgtgggacag agattgttgc      480
aagggggccg gattttagga attcctgtta ttgtaacaga acaataccct aaaggtcttg      540
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tttcaatggt attaccagaa gtagaagcgg cattagcaga gattcccgga gtcaggagtg      660
ttgtattatt tggagtagaa actcatgtgt gcatccaaca aactgccctg gagctagttg      720
gccgaggagt cgaggttcac attgttgctg atgccacctc atcaagaagc atgatggaca      780
ggatgtttgc cctcgagcgt ctcgctcrar ccgggatcat agtgaccacg agtgaggctg      840
ttctgcttca gctggtagct gataaggacc atccaaaatt caaggaaatt cagaatctaa      900
ttaaggcgag tgcctcctcc tcgggtctgc tttccaaagt ataggacatt tgaagaactg      960
gtatgctact cactggtgaa ggacagtcag gtgaaggact gtaagcccac acaagctctt     1020
cttatctcta caaagaattaa aatgttaagt caaaaacggc tccttttttg cgcctcctag     1080
tgaaacttaa ccagctagac catttgagta ccagcattta gttacaaacg tcaaaggctt     1140
ccggtgctgc ttaccttcct tttttgttaa tgtgctttta tttattaaaa aaaattacaa     1200
tgaagatgcc tgttttgtct ctactgtgta ctctgatcgt atctttccaa agtgcagact     1260
cttgtgaagt tttcttaaat tgttcacttt aaagaaaatg acgtaccaac aatgatttgg     1320
cttttatatt actgtaagat gttataatgt taatgtggat gtagtgcttt tactttacag     1380
attgattgga ataagattat tgcatatgaa tttacccaca ggactctgaa tcatgttacc     1440
cactcccctc acaatgttgt ccacttagtg agttgcattg atctatccgt accaaatgat     1500
gttgaataat tacatatctt tcttgactat actgatttct tattttggtc actattacta     1560
aatctctgtt aatattctct cttttaactg aaaagggatg ggatagaagg gtttgcaatg     1620
ccatattatt ggtggagggc tgtttttaaca tctttgaagt atggcttgct gaatatcttt     1680
accaacatct tgaatatata ttctagtgtc cacaagattt agcaaaaaga taaagcttgg     1740
gtggaatatc attttaaaat gttcatgttc tgttctatat tttcttcacc tactctccaa     1800
atattgtaat gcaaaaagtc tcagtaatga tttggtagta ttaattttgt ggtcattgtt     1860
tctcttcgat aaatttattt tcattaaata cttrttagag ggtttttgaaa tgtttttcaa     1920
atatgtgaaa tgtgaaactg ctgtcttttta tattaaagta attaaagaaa atgtattgtg     1980
attgaaatta ttttgncctc cacaagatgg ctctatgagt attcttccag ggattctaat     2040
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<210> 124
<211> 1717
<212> DNA
<213> Homo sapiens

<400> 124

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cccggcgga gctggacccg cggtgggcta ggggcagggc cggagccgcg gcggcggagc       60
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tttggtggtg aagagatggc tgacagtgtc aaaaccttc tccaggacct tgccagagga      180
atcaaagact ccatctgggg tatttgtacc atctcaaaca tagatgctcg aatccgacaa      240
aagagagagg agcagcgtcg aagaagggca agtagtgtct tggcacagag aagagcccag     300
agtatagagc ggaagcaaga gagtgagcca cgtattgtta gtagaatttt ccagtgttgt     360
gcttggaatg gtggagtgtt ctggttcagt ctcctcttgt tttatcgagt atttattcct     420
gtgcttcagt cggtaacagc ccgaattatc ggtgacccat cactacatgg agatgtttgg     480
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tcgtggctgg aattcttcct cacgtcaatt ttcagtgctc tttgggtgct ccccttgttt      540
gtgcttagca aagtggtgaa tgccatttgg tttcaggata tagctgacct ggcatttgag      600
gtatcaggga ggaagcctca cccattccct agtgtcagca aaataattgc tgacatgctc      660
ttcaaccttt tgctgcaggc tcttttcctc attcagggaa tgtttgtgag tctctttccc      720
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tgctttgaat atcgttggtt caataaagga attgaaatgc accagcggtt gtctaacata      840
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cagtcctcat atattatcag tggctgcctt ttctctatcc tctttccttt attcattatc      960
agcgccaatg aagcaaagac ccctggcaaa gcrtatctct tccagttgcg cctcttctcc     1020
ttggtggtct tcttaagcaa cagactcttc cacaagacag tctacctgca gtcggccctg     1080
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tgtggcagct cttttccctg ttcacctccc gcctgccagg gaaggcagga cccgctctgc     1260
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ttgctcctgg tcactcctt tatagccatt actgtcttgt ttcttgtaac tcaggttagg     1680
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<210> 125
<211> 804
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (721)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (723)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (730)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (766)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (769)
<223> n equals a,t,g, or c

<400> 125
ccacgcgtcc ggtcactatg tagtggaggg gcagacaccc tcccgcaaat tctggaaggt       60
tcttagtctc gactagggca gtagccccag gactcctagt cgccggcttc aggtcactgc      120
cggctgaacg gagctgccgt cgccatgttt ggctgcttgg tggcggggag gctggtgcaa      180
acagctgcac agcaagtggc agaggataaa tttgtttttg acttacctga ttatgaaagt      240
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```
atcaaccatg ttgtggtttt tatgctggga acaatcccat ttcctgaggg aatgggagga      300
tctgtctact tttcttatcc tgattcaaat ggaatgccag tatggcaact cctaggattt      360
gtcacgaatg ggaagccaag tgccatcttc aaaatttcag gtcttaaatc tggagaagga      420
agccaacatc cttttggagc catgaatatt gtccgaactc catctgttgc tcagattgga      480
atttcagtgg aattattaga cagtatggct cagcagactc ctgtaggtaa tgctgctgta      540
tcctcagttg actcattcac tcagttcaca caaaagatgt tggacaattt ctacaatttt      600
gcttcatcat ttgctgtctc tcaggcccag atgacaccaa gcccatctga aatgttcatt      660
ccggcaaatg tggttctgaa atggtatgaa aacttttcaaa gacgactagc acagaaccct      720
ntntcttggn aaacataatt tgaataaaat aattttaat ggattntgna aaaaaaaaaa      780
aaaaaaaaaa aaaaaaaaaa aaaa                                             804
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<210> 126
<211> 431
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (277)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (313)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (380)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (416)
<223> n equals a,t,g, or c

<400> 126
ggcacagccc agggccttga agccagctgg ccctggagag gggctgctgt gccagcttgg       60
ggagggtctg ggatggggct gcccctgatg gccctgatgt ggagtacctt gccagcatct      120
gctgggggtga actttatttt agcccttccc ttgttgctct tatggaagaa cagaggaggg      180
gtgggcaggt cagtgatgtc agcagtggag tgattcccag cacagcggct tctgggaaga      240
gggcatggag gcatttcttt cagggaaatg gtccatnatt tcagccagaa ggcattgcat      300
taagttaagt ccnggacttt tgtggcccag ctctgtgtta ttaagggccc ttggcgaaga      360
cttcaaggag ggggcaaaan gacctttaag tttttaggtt taacacaggg aacccncaaa      420
gggttattt g                                                           431
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<210> 127
<211> 3752
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (435)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2186)
<223> n equals a,t,g, or c

<400> 127
nggcacgagg agagtcacct ggactcagaa ctagagatat ccaatgaccc agacaaaatt      60
aaacttcagc tttctaagca taaggagttt cagaagactc ttggtggcaa gcagcctgtg     120
tatgatacca caattagaac tggcagagca ctgaaagaaa agacttgct tcccgaagat      180
astcagaaac ttgacaattt cctaggagaa gtcagagaca aatgggatac tgtttgtggc     240
aagtctgtgg agcggcagca caagttggag gaagccctgc tcttttcggg tcagttcatg     300
gatgctttgc aggcattggt tgactggtta tacaaggtgg agccacagct ggctgaggac     360
cagcccgtgc acgggggacc ttgacctcgt catgaacctc atggatgcac acaaggtttt     420
ccagaaggaa ctggngaaag cgaacaggaa ccgttcaggt cctgaagcgg tcaggccgag     480
agctgattga gaatagtcga gatgacacca cttgggtaaa aggacagctc caggaactga     540
gcactcgctg ggacactgtc tgtaaactct ctgtttccaa acaaagccgg cttgagcagg     600
ccttaaaaca agccgaagtg tttcgagaca cagtccacat gctgttggag tggctttctg     660
aagcagagca aacgcttcgc tttcggggag cacttcctgg atgacacaga ggccctgcag     720
tctctcattg acacccataa ggaattcatg aagaaagtag aagaaaagcg agtggacgtt     780
aactcagcag tagccatggg agaagtcatc ctggctgtct gccaccccga ttgcatcaca     840
accatcaaac actggatcac catcatccga gctcgcttcg aggaggtcct gacatgggct     900
aagcagcacc agcagcgtct tgaaacggcc ttgtcagaac tggtggctaa tgctgagctc     960
ctggaagaac ttctggcatg gatccagtgg gctagacca ccctcattca gcgggatcag     1020
gagccaatcc cgcagaacat tgaccgagtt aaagccctta tcgctgacca tcagacattt     1080
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tccctaagtc agccaacccc tcctcccatg ccaatccttt cacagtctga agcaaaaaac     1260
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aataaatacc ggttcttcct cggcaatcag tttgggattt ctcagcagtt gcggctggtc     1800
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gtccaaacca tcttcccggg. cagcttcccc tactcgttca agctccagtg ctagtcagag     2040
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tatcccatca tcaggtagca agttgaaacg accaacacca acttttcatt ctagtcggac     2160
atcccttgct ggtgataccca gcaatagtt cttccccggc ctccacaggt gccaaaacta     2220
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ggcccagaaa tgaaatattt gagaaaaaca agtgaaaagg tcaagataca aatgtgtatt     2760
aaaaaaaaaa aagcctatta atagggtttc tgcgcggtgc agggttgtaa acctgcttta     2820
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tcttttagga ttattcctaa atgcatcttc tttataaact tgacttgcta tctcagcaag      2880
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cacggacacc tcaattagca agaactgagg ggagggcttt ttccattgtt taatgttttg      3000
tgatttttag ctaaagagag ggaacctcat ctaagtaaca tttgcacatg atacagcaaa      3060
aggagttcat tgcaatactg tctttggata ttgtttcagt actgggtgtt taaaggacaa      3120
atagctgcta gaattcaggg gtaaatgtaa gtgttcagaa aacgtcagaa catttggggt      3180
tttaaactga tttgttgctc cctatccagc ctagacacca gtaactcttg tgttcaccag      3240
gacccagacc cttggcaagg gataggctcg ttggtgacat tgtgaatttc agatttgttt      3300
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ggagttcacc agcacacttg ttaaccagtc ctgtttgctt tcgtcttttt ttgtgcgtaa      3480
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agaaactgaa gctctaccaa tgaactgttt agaaacaaga cacacttttg tattaaaatt      3660
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```

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<210> 128
<211> 1144
<212> DNA
<213> Homo sapiens

<400> 128
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cttagcagcg ccttcccttc accactccag caaacacgct ggcaagcatc ggcctcactg     180
gcacagaaaa ctcccctgct cctcacgctc cctccacctc cagtccagct gacgacttgg     240
gacagaccta caacccgtgg cggatatgga gcccacgat tggaagaaga agctcggacc      300
cttggtctaa ttcgcacttt cctcacgaga attaaattaa gcaaaaaaca aacaaacata     360
gtgggccctc gtctagatca tgatgtgcca gtttctgaga catcttttta aggctcttac     420
tgcagctccc ctccccaccc tcctcttctt tgcaaaacag acccaagcag ggcaggctca     480
gaccactcgc ttcttcaga tctttcttgc aattatgata acatgagatt tgctgttgtg     540
cttttagaga aaagtctgga ctcagccaca aactctaata agacctgtac atctgagaac     600
ctttcccgtt actgcgtttt caccacctgt cttcccatg ctttatttat ctgtatgaac     660
acagatttga cattacagct aaggaaataa tttgagttga ttcagaaatc ctggcatgtg     720
acaatttgt taaattacca agtttggttt ttaataattt ctcaatatta tgcgccaaga     780
tctaatttta aaactgtatg aggactttgt gctgaaaata gagtatttt ttaaagtaag     840
gctgtcttgg tttaaaagca gattacagaa atgtaagtca acttaagaac rgtgaatgaa     900
tgtaaaaaca ttcagttgyag accatatgca ttttctgtgc tgtttgtact tgaggtatgt     960
aacatttgta tacctgaact tattttaaag atgaactgaa atgcacatag ccaagtcttg     1020
agatacaaga ttgaatgtgt atttcttaaa aatacaactt tgtgttgtac tttgaaataa     1080
atgatgcttt tttcaaaaaa aaaaaaaaaa aaaaaaaaac tcgagggggg gcccggtacc     1140
caat                                                                   1144
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<210> 129
<211> 1830
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (317)
<223> n equals a,t,g, or c

<400> 129
gcatgcagag gagcaccctg agcgtgtycc tggagcaggc ggccatsttg gcacggagcc      60
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acgggttgct gcccaagtgc atcatgcagg ccacggacat catgcggaac agggcccaag      120
ggtggagatt ctggccaaaa acctgcgagt caaggaccag atgcccagg gtgctccgcg       180
cctctaccgc ctctgccagc cgccggtgga tggggacctc tgaacaccca aatgccccac      240
gctggccgc ggctctggga gctgggatt gggaggacac agcaggcagc gctggccttc        300
tccagggatg gcccaangct tccgcarccg cccgttccgg gacctgccca gcgtcctccc      360
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aacccggtt tccttcaacg tccacattcc aggtgaccac acgtgtctcc tcctcctcat      660
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gttgttggtg ttgtcaaagt ttgtttttc taaagttgtg tgattatata tttgacattt      960
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ccctccaggg tgcgcttccc tctcttgccg cagcatacac gagggcaggc agtggccttg    1680
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cgttaaattc ttgatagatt ttttattatt                                      1830
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<210> 130
<211> 1864
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1648)
<223> n equals a,t,g, or c

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agcagctgac ccgctgcacc aagccatgcg ggcagckgga gatgagttcg agacccgctt      180
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aggaaggcaa atcaaggtga tcccaaaacg aaccaacaga ccaggcatca gcacaacaga     960
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tcatttccag gggtgggaat tttttttttaa tatgtgtcat gaataaagtt gtttttgaaa    1800
akaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1860
aaaa                                                                 1864


<210> 131
<211> 2041
<212> DNA
<213> Homo sapiens

<400> 131
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ttgctggcct acgtcgcctc tgtttggggc aacttcgtta atatgaggtc tatccaggaa    180
aatggtgaac taaaaattga aagcaagatt gaagagatgg ttgaaccact aagagagaaa    240
atcagagatt tagaaaaaag ctttaccag aaataccac cagtaaagtt tttatcagaa    300
aaggatcgga aaagaatttt gataacagga ggcgcagggt tcgtgggctc ccatctaact    360
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aagagaaacg tggagcactg gatcggacat gagaacttcg agttgattaa ccacgacgtg    480
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gtgaaattca gtttctctcc gaagcccagg atgacccaca gaaaagaaaa ccagacatca    1140
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aagcaattca ctactccgt aaagaactcg agtaccaggc aaataatcag tacatcccca    1260
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aggacacaag actaccattg tacacttgat gggatgtatt tttggctttt ttttgttgtc    1380
gtttaaagaa agactacaac aggtgtcatg aagaacaaac tggaatttca ttctgaagct    1440
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cactttttga atctctcttt ttatgtaaaa tagcgtagat gcatctctgc gtattttcaa    1560
gtttttttat cttgctgtga gagcatatgt tgtgactgtc gttgacagtt ttatttactg    1620
gtttcttttgt gaagctgaaa aggaacatta agcgggacaa aaaatgccga ttttatttat    1680
aaaagtgggt acttaataaa tgagtcgtta tactatgcat aaagaaaaat cctagcagta    1740
ttgtcaggtg gtggtgcgcc ggcattgatt ttagggcaga taaaagaatt ctgtgtgaga    1800
gctttatgtt tctcttttaa ttcagagttt ttccaaggtc tccattttgag ttgcaaactt    1860
gactttgaaa tattcctgtt ggtcatgatc aaggatattt gaaatcacta ctgtgtttttg    1920
ctgcgtatct ggggcggggg caggttgggg ggcacaaagt taacatattc ttggttaacc    1980
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atggttaaat atgctatttt aataaaatat tgaaactcac caaaaaaaaa aaaaaaaaaa      2040
a                                                                      2041


<210> 132
<211> 2012
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (202)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (541)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (560)
<223> n equals a,t,g, or c

<400> 132
taccaagctg caagaatcta ctatatcatg gcagaagaag tagagtggga ctattgccct        60
gaccggagct gggaacggga atggcacaac cagtctgaga aggacagtta tggttacatt       120
ttcctgagca acaaggatgg gctcctgggt tccagataca agaaagctgt attcagggaa       180
tacactgatg gtacattcag gntccctcgg ccaaggactg gaccagaaga acacttggga       240
atcttgggtc cacttatcaa aggtgaagtt ggtgatatcc tgactgtggt attcaagaat       300
aatgccagcc gcccctactc tgtgcatgct catggagtgc tagaatctac tactgtctgg       360
ccactggctg ctgagcctgg tgaggtggtc acttatcagt ggaacatccc agagaggtct       420
ggccctgggc caatgactct gcttgtgttt cctggatcta ttattctgca gtggatccca       480
tcaaggacat gtatagtggc ctggtggggc ccttggctat ctgccaaaag ggcatcctgg       540
nagccccatg gaggacggan tgacatggat cgggaatttg cattgttgtt cttgattttt       600
gatgaaaata gatcttggta tttggaggaa aatgtggcaa cccatgggtc ccaggatcca       660
ggcagtatta acctacagga tgaaactttc ttggagagca ataaaatgca tgcaatcaat       720
gggaaactct atgccaacct taggggtctt accatgtacc aaggagaacg agtggcctgg       780
tacatgctgg ccatgggcca agatgtggat ctacacacca tccactttca tgcagagagc       840
ttcctctatc ggaatggcga gaactaccgg gcagatgtgg tggatctgtt cccagggact       900
tttgaggttg tggagatggt ggccagcaac cctgggacat ggctgatgca ctgccatgtg       960
actgaccatg tccatgctgg catggagacc ctcttcactg tttttttctcg aacagaacac      1020
ttaagccctc tcaccgtcat caccaaagag actgaaaaag cagtgccccc cagagacatt      1080
gaagaaggca atgtgaagat gctgggcatg cagatcccca taaagaatgt tgagatgctg      1140
gcctctgttt tggttgccat tagtgtcacc cttctgctcg ttgttctggc tcttggtgga      1200
gtggtttggt accaacatcg acagagaaag ctacgacgca ataggaggtc catcctggat      1260
gacagcttca agcttctgtc tttcaaacag taacatctgg agcctggaga tatcctcagg      1320
aagcacatct gtagtgcact cccagccaggc catggactag tcactaaccc cacactcaaa      1380
ggggcatggg tggtggagaa gcagaaggag caatcaagct tatctggata tttctttctt      1440
tatttatttt acatggaaat aatatgtattt cacttttct ttagtttctt tgctctacgt      1500
gggcacctgg cactaaggga gtaccttatt atcctacatc gcaaatttca acagctacat      1560
tatatttcct tctgacactt ggaaggtatt gaaatttcta gaaatgtatc cttctcacaa      1620
agtagagacc aagagaaaaa ctcattgatt gggtttctac ttctttcaag gactcaggaa      1680
atttcacttt gaactgaggc caagtgagct gttaagataa cccacactta aactaaaggc      1740
taagaatata ggcttgatgg gaaattgaag gtaggctgag tattgggaat ccaaattgaa      1800
ttttgattct ccttggcagt gaactacttt gaagaagtgg tcaatgggtt gttgctgcca      1860
tgagcatgta caacctctgg agctagaagc tcctcaggaa agccagttct ccaagttctt      1920
aacctgtggc actgaaagga atgttgagtt acctcttcat gttttagaca gcaaaccta      1980
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tccattaaag tacttgttag aacactgaaa aa                                    2012


<210> 133
<211> 1669
<212> DNA
<213> Homo sapiens

<400> 133
gagcagtatt ttaaccaact tgtattacag atgttacagt tcatgttagg aagtcagaaa       60
agactttgtt tgtctttgtt ctgctgatgt gagtcatgtt ttgtggggtc ttccatggca      120
catttacctg ttgctccgtc cagatgttga gggccagtct aggctgcagt atcctacccg      180
aggacaagcc tgttctccat ttcttcactc tcccctcccc atatagcaac tctcccaggt      240
ttagattacc gttttcgacg acagattaac caaaaatgcc ccacacaggt tttattactg      300
ttatatacta tacttttaac agtacagacc ctaaatttta ttatttgttg ctcccccaat      360
ctgataccaa atgtttaaag ttgtttgaaa tccaaacatg gtagtgttca tgggtaaata      420
ttttctaggc tatgtaagag ttagcagccc atagcataga agtaatcaag tagcatctga      480
gactgttgga ggcactaggg cctctctggg cctaacagcc tcacttcccc agcctcacct      540
tgctgtcctc tgacactgcc atcagggctg ttagtggcac ctgtatgagg ccaagtgtgc      600
gtccagggga acagcacagg ttaatgcgtc tccctagaac tcatgaagtc agtttaattc      660
atgcatgaac atgagttcat tttatgtttt atatagcttt cttagacata ccaaaccatc      720
attcataaat cagataaatt attcagtttt tgtgtttaga aagctaagta tgtgtagctg      780
gaaacaaaaa tgagcgtgtt ttctctcctg ttaatctaga gtgtgcagt acacatgtgt       840
ggataaatttc atgttccagg ggcgcttggc atctccatg gactgattcc caggaagaaa      900
agcccaaagg gaaacccacg attcctttcg agtagatgtg ggaaagagcc cattggagga      960
tatgaggtcc tgtgaaattc agttgtgtgt gtggctcctt gttagcagtc atgttgacat     1020
ggtgttagga ggctccccat ccaccctta catgatgtag ggaccagtgt cttgtgagat     1080
taaccttggg acacagtggg ttagcctgga gaaaatgaga ggccctgcct ggacccaggg     1140
agaggagcca gtgacacagg cagagcggtg cagccctcct tccttccat ttggaggagg      1200
tggtgccagg agcctgcccg cttacctctg ctgaagcata agtggacttt gcttttgggg     1260
cttatctctg atacatgctg gagccctgcc tctccactgc tagatggaac ctggaatctc     1320
tcatctacct cttagtctgt cagtttctac gtgtgagaag caagcttgtg ggcagtgtc      1380
cttgtacatg ctgtagcact taaaaaataa ttccagggtt ccctggaaaa ccagtcccag     1440
ggttcctatg atctgtagtt tctacctgga ttataactgg tttgggtac ctgaattttg      1500
attggttagc cttaattata gtctggcgtg atcatgtaga atctttctg gtgaacagat      1560
cataaagttc tatcaaggag ttctatcaag gcatccatgt cagtggtgct atgctggtta     1620
caacttgaga tttttgaaat aaaaaatttg tcataaaaaa aaaaaaaaa                  1669


<210> 134
<211> 1565
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1075)
<223> n equals a,t,g, or c

<400> 134
cacttttgct atataaccta agtgataacc ctctttagt tacctgccaa actctggnct        60
tggtttatat tgcagttaac acagttacaa agctgtaatg gtgtctttt ttcctttgta      120
acggaatgtg taaatcaaag tatatacatt gtgtggtgtt cctgtttctg gagtttcatg     180
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aggatttaca catggcattc agtgttctgt atagatctgc ctacctttgt gaattcatct    240
gttaacccct cttcctttga gagagcaccg gcgatggtgg ttaactcctt gtgtttctc     300
tctctcctac tggttattct tgaattaagc acagactcgt cagctcggtt gctttatcat    360
gaataatgtg tgtgaccttg cagttcctcc acagttcagc aaacaagtgc tagcttcact    420
gaccaaaaat taaggaagga aaacacagtt tttaaaacga tccatctttt aacagccgaa    480
accgatgtgt ctatgtgtgct gcaccttgct gttgtacttc tgaaatcaga cgtgtgtgaa    540
cgatcatttc tgacttaacc gtgagatgct cacgagtacc cttcctgttg ttttgttagc    600
attgaaatcg agactattta tttggaatat atacaacagt gtttttccac tgtatttcat    660
ttgcaaaagt tgagaactgc tttctctacc ttttgcaaaa taattgatat tccatattgg    720
attctcaaag acttcgatat ggtgaaccta ttaaacctag aaattgtatt catcctttca    780
tgactgtggc ctgagttccc cagcccctct cctccttttt tttagatgag atttagcaca    840
ctctcagtta tttaaacatg caacatttct tgagtatgta tgttgaggcc atctgagctc    900
atagctgatt cagtaaccag tttcatgctg tgtcattcac actcactact taatactgcc    960
atggtgaaaa tgtggaggaa aaatgtatcc atgtgtgtct gggaagcata tacacttgta   1020
catttttaa tactctgatt ctgtaacatt tctgagtttt gttttgtttt acagnaaaaa    1080
aaaaaaagt gataaagcaa tcagaagacc aagaggttta ctattgatgc ttagggtcgt    1140
ctgaccttgg ctggccaata gacctacacg gccaaattaa tttacgagag taataatttt   1200
tcaaaagcca attttttttc tgtatttttct gtatgaaact gccaatatca tgaatagaaa   1260
gggagaacca taaaggagaa agaacgtgat gttctgttat gttcatgtaa acctaaagaa   1320
acagtgtgga ggcaggcgcg atcagccgaa ctctcagggac ttggtgttgc ttggaaggca   1380
tccatacctg cattttgcat tcttcgtatg taatcatatt gccaaagaca aactatttca   1440
tcatttattg taaataacac ttttccccag acctaccata aagtttctgt gatgtattgt   1500
cttccagttg caataaaaat tactgagttg catcaattga agaaaaaaaa aaaaaaaaa    1560
ctcga                                                               1565


<210> 135
<211> 2007
<212> DNA
<213> Homo sapiens

<400> 135
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gatttgtggc caggctggac aaattcctga ggcacaactt ggcttcagtt cagatttcaa    120
gctgtgttgg tgttgggacc agcagaaggc aaacgtccag ccaacacaca ggactgtaag    180
aggactctga gctacgtgcc ctgtgaagac ccccaggctt tgtcatagga ggtcgttcag    240
cttcccaaa gtcagaggtg atttgatttg gggaagactg aatattcaca cctaagtcgt     300
gagcatatcc tgagttttac ttccttatgg cttgccctcc aagttctctc tctcatacac    360
acacacaccc ttgctccaga atcaccagac acctccatgg ctccagctat gggaacagct    420
gcattggggc tgcctttctg tttggcttag gaacttctgt gcttcttgtg gctccactcg    480
cgaggcagct cggaggtgtg gactccgatt gggctgcaag cagctctggg acggcacagg    540
gcgggcgctc tgatcagctc gtgtgaaaca caccgtcttc ttggcctcct ggcagttctt    600
tctgcgaata gtcctctccc tggccagttg aatggggaa gctgctggca caggaaggag     660
aggcgatccc ggctgaggct taggaaattg ctggagccgg ctccaagcag ataattcact    720
ggggaggttt tcagagtcaa acatcattct gcctgtkttg ggggccaggt gtgtcacaca    780
agcatctcaa agtcaaaagc catctggggc tgctgcttct ctttctcagg ctctgggaa     840
aggaatctcc ctctcctctc acttgattcc aagtgtgctt gaattgtctg gagcactggg    900
actttttttc tcttttcctt gatggaccaa cagtgcaaat gcaatctcgc catttaactt    960
tcaggtcgat ttcctttcct gatcagacat ctttgtgccc cctttaggaa ggaaaaagaat  1020
acacctacga tgtgccaggc actgtgttag gcgcttttat atagatcctc gttaggatga   1080
gactaaggga tgaggacatc tctttataaa aggcccctaa gtaatggata aacagaaaca   1140
cttagaggtg agaaggtctg tcttcaagat ccaaggtaag attgccttca gtctgatgtt   1200
tgttctcaag gacttatccc ctacaatatt ctcccactcc atacttctcc ttctaccca    1260
ccatgtgctc ccgtgcactc ctcagatggt cagagggggta .acccaagtcc ttagagaatt  1320
tggggaccaa tagaatatgt gatgtgtgaa ttttcttaa aaaacttaag gagtctttgc    1380
tacctcttgc ttgttgagtt gtttttggct tcatattaaa agccagcatc tcactattta    1440
ttgacaggtt gggctgtgtg tgtgcgcatg tgtgtataca tttccaggcg tgcctgtgtc    1500
ctgtagcttt ttaaaaggaa acccagtcat cccactatga atctggcatc ttcttatgct    1560
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tctagtgttt tggccataca tcaaccaagg ggtttaattt atccaatgct tgacgacatg     1620
ttcaggaggg gctggatcaa attttgagag ggttatggga aagggagggg gagaagaaat     1680
tgacatttat tttattattt attttaaatg tttacatctt ctttatgttg tatcaagcct     1740
gaatagaaac tgatagcatt aaaatactcc gttcctctct ctcttctcgc ttcctttttt     1800
tttttttta aatttaggat aacacatttt tgtttctaaa gtgatttgtg atttgtgctg     1860
tataaactgt ataaaaggtt ctgttttaa aggtggattt tcattcctct ggggacagtg     1920
gtcgccaaga catctacatt gtaagagaac acagtggaag atcctgtcct gattctcaaa     1980
aattattttc tctgtatgat taaaagt                                        2007


<210> 136
<211> 1291
<212> DNA
<213> Homo sapiens

<400> 136
cttttaaccc tcccccttca cacacataca tatcaggttg ttttctagtt aaaaacccaa       60
gtagctcaga ttctacttta atgtcagtgc agatttgcat tgaatcatgc cattatgttt      120
tttctcattt ttatgctgtt gggtcttagt ttttaaattg atataaagaa ctcagcaatg      180
gttttatttt ctactcatac ttagggttta ggaaacacta ccactagtta tcatttaatc      240
aacttcaatg gtctactgaa acaaaaatgg taacttttca ttagtggatt atttagagtt      300
atagtagttg tttccagaaa acacttcctc acaattgtac ttcccaatca aatcatgtga      360
tcatacagtt attcccatga aaggcagaat gtttgtttca aaattaatct agttttctgt      420
acatttaaat ttgagaaggt gacaactggc tctttttccag tcttccttca tgtcagtttt      480
ctgatagacc actattggca aacagtatct gtcaactacc aaatgtgtaa aatttttctgt      540
atttcacttt gtcttatttg taaatagtga actaaaactt ttggcagatc agcaacattt      600
gctgagcctg tttttaagc taatgtgtat tcttactaat gttcctatca agaatggatt      660
tgtaatatat gctgtctatt tctaatgttc acattcatat tttgaggttc tatcttattt      720
taatagagaa cagacttctc aaaaaatctt cagaagcagc ttattattga aatatcgaaa      780
tattgaaata aacccggtgg gttagattac tcatctgtcc accaagtggg acatttgcat      840
ggactggggg cttaaaggac ttagaagaga cctgtaagta aatcctgaaa atgagccaat      900
ccccacttga atggttactg gagtaaaccc acctttacca ccccaattac agcacccgag      960
gccgataaac caacttggct ctggttcatt tttcctttct tcatttgtga tgctcagatt     1020
caaaatgtgt gttctacact gttacaggct tctcttttgt ttgattaaag attttagtcc     1080
tacttttgta tggacacatt agaattatca gagaccaaaa tagaagaatt tgctgttaga     1140
tatttttcag aagtcagcag atttgtggca aatcatttat ttgcctttt aaaaattcat     1200
ttaagcagtt cagagagtag actactcaga aaattatttc acgtaattgt ctaagaggtc     1260
aatatttttt aatgcatatt gaatcaaata a                                    1291


<210> 137
<211> 1906
<212> DNA
<213> Homo sapiens

<400> 137
ggcacgagga cctacttttg taacagacca tggttgtgtc caaggtaaaa ccacagtgat       60
attttttggat gcttttgtctg caatcttgac ttgttttttgc agtatcatta ttcagacttc      120
aaattgtgaa tcttttaaac atcttgataa tttgttgttg agagctgttc attctaaaat      180
gtaatgaaat tcagtctagt tctgctgata aagatcatca gttttgaaag gttactgatt      240
ttcctcttcc ctcttagttt tttacccaat atatggagaa gagtaatggt caatcttaac      300
attttgtttt aattgtttaa taaagctgct gggcagtggt gcagcattcc tacctagtgt      360
cataaaaagca aaatacttac atagctttct taaaatatag gaatgacatt acatttttag      420
gagaaagtaa gttgctttgc accgcctact taattccttt ccatatattg tgatacaaac      480
ttttgaatat ggaatcttac tatttgaata gaaatgtgta tgtataatat acatacatac      540
ataagcatat atgtgtgtgt gtgtgtgtat atatatatat atgcatgctg tgaaacttga      600
ctacacaaca taaatcactt tttaaattcc aggaacgggt agtctgacac ggtgattatc      660
cttttgaggc tgaatccgtt attaacttgt tatttaggtt ttactcccag tagcaaggga      720
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ttctaagtta gttgcactta catgattatt gtgatttaaa actaagaata aaggctgcat      780
tttcaaagat aaattggaat tgctgttggt gaaataacaa ccaaaatact gaatctgatg      840
tacatacagg tttctacagg aagagatggt ataacttaca atttggagat ttaataacca      900
gggctaccca gaaaaagtga cttgataaca tggtaccaat aagtaaggga tgctctctcg      960
gtttgctttt gccactttca agatttttaac ttctcaggtt attaatcaaa attattgtat     1020
aagttagcca atagaatttt taggttaaaa caacagatgg ggggtttgtg gagtgtttaa     1080
tgtcatgggc attttagta gcatagaccc tttgttctgc atttgaatgt ttcgtatatt      1140
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catttctagt agtctgatgt attttttctga ggaatagttt gtgattccaa tgcaggtgtc     1260
ttcattacca ttacctctac actgcagaag aagcaaaact cctttattag aattactgca     1320
catgtgtatg gggaaaatag ttctgaaagg ctagaatgat acaagtgagc aaaagttggt     1380
cagcttggct atggagtggt ggcaataatc tctaaacatt ccaaaagacc atgagctgaa     1440
cctaaactcc cttgggaatc tggaacaaag gaatatgaaa attgccattt gaaaactgac     1500
cagctaatct ggacctcaga gatagatcag ccagtggcca aaagccattt caagtacaga     1560
aattatagag actacagcta aataaatttg aacattaaat ataattttac cacttttttgt     1620
cttataaagc atatttgtaa actcagaact gagcagaagt gactttactt tctcaagttt     1680
gatactgagt tgactgttcc cttatccctc acccttcccc ttcccttttcc taaggcaata     1740
gtgcacaact taggttattt ttgcttccga atttgaatga aaaacttaat gccatggatt      1800
ttttttttt gcaagacacc tgtttatcat cttgtttaaa tgtaaatgtc cccttatgct       1860
tttgaaataa atttccttttt gtaaaaaaaa aaaaaaaaaa aaaaa                     1906



<210> 138
<211> 1935
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (450)
<223> n equals a,t,g, or c

<400> 138
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agctagtact gactgacatt cattgtgatg agggcagctt tctggtacag gattctaagc      120
tctatgtttt atatacattt tcatctgtac ttgcacctca ctttacacaa gaggaaacta      180
tgcaaagtta gctggatcgc tcaaggtcac ttaggtaagt tggcaagtcc atgcttccca      240
ctcagctcct caggtcagca agtctacttc tctgcctatt ttgtatacto tctttaatat      300
gtgcctagct ttggaaagtc tagaatgggt ccctggtgcy tttctacttt gaagaaatcca     360
gtttctgcct cttttttggaa aagaaaacaa agtgcaattg ttttttactg gaaagttacc     420
caatagcatg aggtgaacag gacgtagttn aggccttcct gtaaacagaa aatcatatca      480
aaacactatc ttcccatctg tttctcaatg cctgctactt cttgtagata tttcatttca      540
ggagagcagc agttaaaccc gtggattttg tagttaggaa cctgggktca aaccctcttc      600
cactaattgg ctatgtctct ggacaagttt ttttttttt ttttttttaa acccttctg       660
aactttcact ttctatgtct acctcaaaga attgttgtga ggatttgagat aatgcatttg     720
taaagggtct gccagatagg aagatgctag ttatggattt acaaggttgt taaggctgta      780
agagtctaaa acctacagtg aatcacaatg catttacccc cactgacttg gacataagtg      840
aaaactagcc agaagtctct ttttcaaatt acttacggt tattcaatat aaaatttttg       900
taatggataa tcttatttat ctaaactaaa gcttcctgtt tatacacact cctgttattc      960
tgggataaga taaatgacca cagtacctta attctaggt gggtgcctgt gatggtccat      1020
tgtaggtaag gacatttttct ytttttcagc agctgtgtag gtccagagcc tctgggagag     1080
gaggggggta gcatgcaccc agcagggagac tgaactggga acctcaaggt tctttttact     1140
gtggggtagt gagctgcctt tctgtgatcg gtttccctag ggatgttgct gttcccctcc     1200
ttgctattcg cagctacata caacgtggcc aacccagta ggctgatcct atatatgatc      1260
agtgctggtg ctgactctca atagcccac ccaagtctggc tataggttta cagatacatt      1320
aattaggcaa cctaaaatat tgatgctggt gttggtgtaa ctaatatgta tggccagaac     1380
tgaaacttag agttataatt catgtattag ggttctccag agggacagaa ttagtaggat     1440
atatgtatat atgaaaggga ggttattagg gagaactggc tcccacagtt agaaggcgaa     1500
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gtcgcacaat aggccgtctg caagctgggt tagagagaag ccagtagtgg ctcagcctga      1560
gttcaaaaac ctcaaaactg gggaagctga cagtgcagcc agccttcagt ctgtggccaa      1620
aggccaagag cccctggcaa ccaacccact ggtgcaagtc ctagattcca aaggctgaag      1680
aacctggagt ctgatgtcca agagcaggaa gagtggaaga aagccagaag actcagcaaa      1740
caaggtagac agtgtctacc accayagtgg ccataccaaa gaggctaccg attccttcct      1800
gctacctgga tccctgaagt tgccctggtc tctgcacctt ctaaacctag ttcttaagag      1860
cttttccatta catgagctgt ctcaaagccc tccaatwaat tctcagtgta agyttcaaaa      1920
aaaaaaaaaa aaaaa                                                      1935
```

<210> 139
<211> 1446
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<400> 139

```
ngcccccttg gcacaagtca gatgaagcac gttctgccgg ggaggccctc amcttccaga        60
gaggacagac acagatttcc tgctggggga gggaggagtc cacgcatcct gatgctgcct       120
ggaagcttat tttcccgtgg ccaggatgca tttctctgag tggaaacagg ttcttgcatg       180
tggatgtgtg tttccccagg cagacggccc ctctyttccc agcacttccc tgcctccccc       240
aggcctcagg ccagcaccca gttcctcctc acatggcagg tgagcacaga cttctagttg       300
gcaggagctg aggagggtga acaaaccccg agggaggccc ggcccttgct cccgagttgg       360
ggggagggg tgtggcaacg tgcccccgc agaggccacg catgtttgac caaagccctc       420
attgtggtcc gaggacagcc ttttccccag gcctcaragc attgctcatc cgtgccaaac       480
tgggtaggtg gatttgagcg gaaagactcc caaaatgtgc caagaatttc ccrgtcccag       540
gcagggcagg ggaaactaag ggcaagcagg atacagggcg agggatgtgg caggtgaggg       600
ggctcccgcc tgtgcccctt ctcctcacca tgtctccccc accctgcctc agttctccgt       660
tcccttcat ctccgtcccc ctctttgaag ctgtccccat ctcagtgtca gaccagcctt       720
ctcctcakct gaccacctc ctctgaccsa cgcccctcc ttgtctgaaa aaaggagcct       780
tgaatggtgg agggaggcag tggggagaaa ggtctcaccg gacaggttgg gagaatgagg       840
tcagcggtgc tggggaacag atggagggg cagtgggac agggcttggg cagacaccag       900
caggaataat ttgaaatgtg tgaggtgact ccccggaggc cttgggcttg ggcatttggg       960
aaaagaatga tgtctggaag ggcttaaggg acacagtgga cgaggggaga gtcctcatct      1020
gctggcattt tgtgggggtgt tagtgccaaa cttgaatagg ggctggggtg ctgtcttcca      1080
ctgacaccca aatccagaat ccctggtctt gagtccccag aactttgcct cttgactgtc      1140
ccttctcttc ctacctccat ccatggaaaa ttagttattt tctgatcctt tccctgcct      1200
ggtctagctc ctctccaaac agccatgccc tccaaatgct agagacctgg gccctgaacc      1260
ctgtagacag atgccctcag aattggggca tgggggggac gstgggggac cccatgattc      1320
agccacggac tccaatgccc agctcctctc cccaaaacaa tcccgacaat ccttatccc      1380
tacccaaacc ctttgcggct ctgtacacat ttttaaacct ggcaaaagat gaagagaata      1440
ttgtaa                                                               1446
```

<210> 140
<211> 1109
<212> DNA
<213> Homo sapiens

<400> 140

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ttttttttt tttgatatga aattgtcttt ctccattgca gaaataagct agggaaacac        60
taacccaaaa actttctgta gagctgttcc tttggaggca gcatcactta ttggcagtaa       120
agactcagta taaaagcacc agcatcccta cttgggtgat ggggattaat tttatagcat       180
tccattttcc tagtgccaca tgtgaaattg gattttgatg atcttaatct atattctacc       240
```

```
cttataataa aagatcaaaa gatatatctc ctatgaacag attggagata ggagatgaaa      300
agttgggagg atgtctttat tctaatgtga gggtagggaa aatgtggata acattactgg      360
ggtgarggag gcattgttct ttagttggag ttctcatttt tattctccag tactgacttg      420
tggggaaagc atacttttc actgccaggt actgaatgca gaggctcagt gaagtatata      480
tgtgggaagt gcatgcattt cgtttattag caaacatagc tggattaaga caaagttgtt      540
ggtttggaaa ggggttaaag ccttaagtga acaaatctag ctaacagtga atgaactagg      600
taatataact tgcatatttt taatttcctt tggttaaagg tcccccatac ttctctgttc      660
ggagacatga gaagtatgat tacttcagtg ttagttttct taattttttt tttcccctat      720
ttgtcccttg tcacttttgtt gcaagctaga aatctgtggg ttatacatag ggcagctctt      780
tgtgaaagtg gtttattcca ctggagaaag gggattgaaa atcagttaga accaatgtat      840
ttcttgcccc acggaacact attcctataa gatagctgaa agaagctgct gtgaggagct      900
cagctccaaa cacaggatca gcaccttgta taggaattcc catgaattat gacttctcat      960
tctgtttat cagagtgcat atatgtccta cttcaggaaa agtaaaacag tcatttacga     1020
aagaaagtca atctgtatcc taagcatttt aataaaaagt taaaacaaaa aattaaaagg     1080
gacactcgag gggggccg aaacccaat                                        1109


<210> 141
<211> 497
<212> DNA
<213> Homo sapiens

<400> 141
taggactaac ttaaattctt ttattcatct tttatttatt aaaaaatttt atttctttga       60
attttcctgt aattttctta rgctcttcta taaaatgtta tattcatgtg aaccatacct      120
cattatcctt aacatttact ctcaaaaagc tttttatttt tatttttttg aaggtagttt      180
ttctgtgtgt actgtgtaac atgattttgc tttcaaatca ttgttgtgcc cccatacaaa      240
atgccttta tttttgagga tcgtgtgactt tttagtatgg catgagtgtg ctaaaagcca      300
gatatcttc cacattcact ggtggctttg acacctagtt tttaatctcc catccttact      360
ttaaacccta acagtgcagt cctcagtcga ggccaggacc gggctgaggc cctttgtgga      420
gatgctgcac caccagcaga aggctgagac ctggttacct gtacctgttc acttgtaata      480
aaaagaatta tctaaaa                                                    497


<210> 142
<211> 269
<212> DNA
<213> Homo sapiens

<400> 142
atgaggcaga ggcaagctgc ctgccaaccc cctccctcaa ggaatggcct tgcccaggaa       60
tgcccaccac acataccctc ttcttttttt ctagtcaaac tcttgtttat tccttggctt      120
gcctccctcc tttcctccc tctcaaccctt ttacttctgg tttctatttc atgggatttg      180
gggttgaagt taaacttaca acagtgccgc caacaccaag tcttgcagga aaaaaataca      240
aagaaattta acaaaaaaaa aaaaaaaaaa                                       269


<210> 143
<211> 1269
<212> DNA
<213> Homo sapiens

<400> 143
ttgattgact atggtctctc cggctaccag gaagagtctg ccgaagtgaa ggccatggac       60
ttcatcacct ccacagccat cctgccctg ctgttcggct gcctgggcgt cttcggcctc      120
ttccggctgc tgcagtgggt gcgcgggaag gcctacctgc ggaatgctgt ggtggtgatc      180
acaggcgcca cctcagggct gggcaaagaa tgtgcaaaag tcttctatgc tgcgggtgct      240
aaactggtgc tctgtggccg gaatggtggg gccctagaag agctcatcag agaactcacc      300
```

```
gcttctcatg ccaccaaggt gcagacacac aagccttact tggtgacctt cgacctcaca     360
gactctgggg ccatagttgc agcagcagct gagatcctgc agtgctttgg ctatgtcgac     420
atacttgtca acaatgctgg gatcagctac cgtggtacca tcatcgacac cacagtggat     480
gtggacaaga gggtcatgga gacaaactac tttggcccag ttgctctaac gaaagcactc     540
ctgccctcca tgatcaagag gaggcaaggc cacattgtcg ccatcagcag catccagggc     600
aagatgagca ttccttttcg atcagcatat gcagcctcca agcacgcaac ccaggctttc     660
tttgactgtc tggtgtgccga gatggaacag tatgaaattg aggtgaccgt catcagcccc     720
ggctacatcc acaccaacct ctctgtaaat gccatcaccg cggatggatc taggtatgga     780
gttatggaca ccaccacagc ccagggccga agccctgtgg aggtggccca ggatgttctt     840
gctgctgtgg ggagaagaa gaaagatgtg atcctggctg acttactgcc ttccttggct     900
gtttatcttc gaactctggc tcctgggctc ttcttcagcc tcatgcctcc agggccagaa     960
aagagcggaaa atccaagaac tcctagtact ctgaccagcc agggccaggg cagagaagca    1020
gcactcttag gcttgcttac tctacaaggg acagttgcat ttgttgagac tttaatggag    1080
atttgtctca caagtgggaa agactgaaga aacacatctc gtgcagatct gctggcaagg    1140
gacaatcaaa aacgacaaca agcttcttcc cagggtgagg ggaaacactt aaggaataaa    1200
tatgagctg gggtttaaca ctaaaaacta gaaatataac tctcaaacag taaaaaaaaa    1260
aaaaaaaaaC                                                          1269


<210> 144
<211> 1944
<212> DNA
<213> Homo sapiens

<400> 144
aaaaggcaaa ctataggata acacagagcc cttttgaaa ataaattggc attggagtgt      60
tttaccctct agctgtttta cttagaatgt aacatatgct gcctacccac ctcaaaatgt     120
ctgtactgca agagggccct gggcctctgc tttccatatt cacgtttggc cagagttgta     180
gtcccaaaga agagcatggg tggcagatgg tagggaattg aactggcctg tgcaatgggc     240
atggagcaca aggagtgcaca gcatgcctcc tgccttaccg tgcagtacg ggacagtcc     300
agaacatggt cttcttgcca cggggtgttg ttgtctctgg tggtgctgca tgtctgtggc     360
tcacctttat tcttgaaact gaggtttacc tggatctggc tactgaggct agagcccaca     420
gcagaatggg gttgggcctg tggcccccaa actagggggt gtgggttcat cacagtgttg     480
cctttgtct cctaaagata gggatctact tttgaaggga attgttcctc ccaaataaat     540
ttgctttacc ttggtcct ctttttgtgcc agtattcaag tggtatagct ctgagcaggg     600
tcacatttgg tcgaaacctga cactgtcttg ctgcattctc ctttggcaaa catcagggtc     660
agaattcagg atagcccttc ctagggcact ggacttcttg gcatggggc tgtgttttgca     720
caagttattt tcatgttacc tggagagtgt ccagaggctg ctctgaggct gaggtgtgtt     780
cccccttgcc tggttccagc tgtcagaggg ataccatcct agggtctggg aatccaaggc     840
cacgagactc cttggtttgt ggtccggagat cctgtactaa ggaggggtctg gccagaggaa     900
cagaccagct tttgcacaat gaagcgcaag ggaacaagtg gtttgcctgg tgtcctacct     960
gtcctgaacc tggtcctgtg ggccattgaa aagttagatc tgtgatctct ggggttttg    1020
tggctttgtt caatgcttcc actctagggc aggcagagca gtctatactc tcccaagcct    1080
gcttgacctc caagtagagc tgatacagag atctgtgaat attgtgatag aaattctttg    1140
gtattcatac atttcagctg caagtcagca atttcccagg ttctcatgta gctataaaac    1200
agtcattctt aaagacagag gatgctgtg actcatggga tcatgaggtc catggctggt    1260
tgcaggttcc ctttttcctt cctcaggttt tgtctcttcc tgtgttgtcc ccagcaaggg    1320
agagactgtg gggtggattg ggagaacaga ttaggagtat agcaaatgaa cccagaatgg    1380
aacagtgggg agctaactgt gaatgaggag agtaacctgct gcaggacctg gaggtcaggt    1440
gtgaatgctg tattggcaca gggaataaat atcctggcgt ggagcctt cacctctccg    1500
tcaagtcctt cctgtgatac tgccatggca caggatctga gttgcagctc tgcaccctaa    1560
atcacaccct gggcattgtc tgggctgcag ggctgccagg ttctgtactt gtgtccagct    1620
gtggccctgg atgctggagc tggaggggtt tctgtgctca gactgtagcc tgtagctctt    1680
ggctgtgta gagcccccctc ctgtgccctc agtggctgtc gtttgttaac tgctcctacct    1740
agatgggaaa ggtcaggcag aattttctg ccctacaaag ggtggaagag aaaggacaca    1800
gtattttcat gaatttacca tatatctttg ttttttcttca acgaaaaagt taattgaggc    1860
aatgtcatct gctcaaagtt gagtggttta ttcacaataa actgtaagtt tctgattata    1920
aaaaaaaaaa aaaaaaaaaa aaag                                          1944
```

```
<210> 145
<211> 1021
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (653)
<223> n equals a,t,g, or c

<400> 145
tcgacccacg cgtccggggt gcgcaacggg gagttccggc tggagacccg tgctctgggc      60
cggcggcctt caccatggcc cggcagagct ggactacacc atcgagatcc cggatcagcc     120
ctgctggagc cagaagaaca gcccccagcc aggtgggaag gaggcagaaa ctcggcagcc     180
tgtggtgatt ctyttgggct ggggtggctg caaggacaag aaccttgcca agtacagtgc     240
catctaccac aaaaggggct gcatcgtaat ccgatacaca gccccgtggc acatggtctt     300
cttctccgag tcactgggta tcccttcact tcgtgttttg gcccagaagc tgctcgagct     360
gctctttgat tatgagattg agaaggagcc cctgctcttc catgtcttca gcaacggtgg     420
cgtcatgctg taccgctacg tgctggagct cctgcgacc cgtcgcttct gccgcctgcg     480
tgtggtgggc accatctttg acagcgctcc tggtgacagc aacctggtag gggctctgcg     540
ggccctggca gccatcctgg agcgcccgggc cgccatgctg cgcctgttgc tgctggtggc     600
ctttgccctg gtggtcgtcc tgttccacgt cctgcttgct cccatcacag ccntcttcca     660
cacccacttc tatgacaggc tacaggacgc gggctctcgc tggcccgagc tctacctcta     720
ctcgagggct gacgaagtag tcctggccag agacatagaa cgcatggtgg aggcacgcct     780
ggcacgccgg gtcctggccg gttctgtgga tttcgtgtca tctgcacacg tcagccacct     840
ccgtgactac cctacttact acacaagcct ctgtgtcgac ttcatcgcgca actcgtccg     900
ctgctgaggc cattgctcca tctcacctct gctccagaaa taaatgcctg cacctcccc     960
acaaaaaaaa aaaaaaaaaa actcgaggggg gggcccggta cccaattcgc cctataaagg    1020
t                                                                     1021


<210> 146
<211> 1285
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1251)
<223> n equals a,t,g, or c

<400> 146
ggcacgagga gggccacggc agccatcgcg ctttgcagtt cggtctcctg gtgtacggcc      60
aacgccaagt aggggattgc gttccctcca gtcgcagacc ctatcagatt tggatatgtc     120
cttcatattt gattggattt acagtggttt cagcagtgtg ctacagtttt taggattata     180
taagaaaact ggtaaactgg tatttcttgg attggataat gcaggaaaaa caacattgct     240
acacatgcta aaagatgaca gacttggaca acatgtccca acattacatc ccacttccga     300
agaactgacc attgctggca tgacgtttac aactttttgat ctgggtggac atgttcaagc     360
tcgaagagtg tggaaaaact accttcctgc tatcaatggc attgtatttc tggtggattg     420
tgcagaccac gaaaggctgt tagagtcaaa agaagaactt gattcactaa tgacagatga     480
aaccattgct aatgtgccta tactgattct tgggaataag atcgacagac ctgaagccat     540
cagtgaagag aggttgcgag agatgtttgg tttatatggt cagacaacag gaaaggggag     600
tatatctctg aaagaactga atgcccgacc cttagaagtt ttcatgtgta gtgtgctcaa     660
aagacaaggt tacggagaag gcttccgctg gatggcacag tacattgatt aacacaaact     720
cacattggtt ccaggtctca acgttcaggc ttactcagag atttgattgc tcaacatgca     780
taacttgaat tcaatagact tttgctggtt ataaaacaga tgtttttttag attattaata     840
```

```
ttaaatcaac ttaatttgaa tgagaattga aaactgattc aagtaagttt gagtatcaca      900
atgttagctt tctaattcca taaaagtact tggtttttac agtttataat ctgacatcac      960
cccagcgcca tttgtaaaga gcaactttcc agcagtacat ttgaagcact ttttaacaac     1020
atgaaactat aaaccatatt taaaagctca tcatgtcaaa tttttatgt acttttctgg      1080
aactagtttt taaattttag attatatgtc cacctatckt aagtgtacag ttaataatta     1140
gcttattcaa tgattgcatg atgccttaca gttttcaata actttttttc ttatgcaaac     1200
gtcatgcaat aaaacaaact ctaatgtttg gcaaaaaaaa aaaaaaaaaa ntcgaggggg     1260
ggcccgtacc caattcgccc taaag                                           1285
```

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<210> 147
<211> 1386
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (821)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (950)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (955)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1023)
<223> n equals a,t,g, or c

<400> 147
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```
ggcacgaggt ggcgcagggg tcagtggttc tctcgggtct cgggacaggt gagcaccctg       60
atgaaggcca cggtcctgat gcggcacctg ggcgggtgca ggagatcgtg ggcgccctcc      120
gcaagggcg cggagaccg ttacaggtga tttctgattt tracatgacc ttgagcaggt        180
ttgcatataa tggaaagcga tgcccttctt cttacaatat tctggataat agcaagatca      240
tcagtgagga gtgtcggaaa gagctcacag cgctccttca ccactattac ccaattgaga      300
tcgacccaca ccggaccgtc aaggagaagc tacctcatat ggtggaatgg tggaccaaag      360
cgcacaatct cctatgtcag cagaagattc agaagtttca gatagcccag gtggttagag      420
agtccaatgc aatgctcagg gagggatata agaccttctt caacacactc taccataaca      480
acattcccct tttcatcttt tctgcgggca ttggtgatat cctggaagaa attatccgac      540
agatgaaagt gttccacccc aacatccaca tcgtgtctaa ctacatggat tttaatgaag      600
atggtttttct ccagggattt aagggccagc tgatacacac atacaacaag aacagctctg      660
tgtgtgagga ctstggttac ttccagcaac ttgagggcaa aaccaatgtc atcctgctgg      720
gagactctat cggggcacctc accatgccac atggggtttcc tggtgtgcag aacattctca     780
aaatttggctt cctgaatgac aaggtggagg agcggcggga ncgctacatg gactcctatg      840
acatcgtgct ggagaaggac gagactctgg atgtggtcaa cgggctactg cagcacatcc      900
tgtgccaggg ggtccagctg gagatgcaag gcccctgaag ggcgaggctn ccagnccgcc      960
tgcaggccgt ggtgaggagg ggcgcctccc cagagtctgc tcccccgtga acacagagca     1020
gangccaggg tggccagcag tggctgggtc cttccgcgcc cctccgtcct cctttccctg     1080
agcaccttca tcaccagagg cttgaaggaa ccccgccatg tggcagggca caggcactgt     1140
tcctggtgaa ccttggacca cagcatgtca gtgctctagg gattgtctac tccagggatt     1200
ttcttcaaaa tttttaaaca tgggaagttc aaacaaatat aatgtgtgaa acagatcaaa     1260
attttaaaa tgaaaaaaaa gctgctctga ttcagggat gtgggtcggg gtagaacctg      1320
```

```
gacctcttgg cctgggggca catgggatgc ttctaggaac acagtttgag aaccaccaaa      1380
aaaaaa                                                                  1386


<210> 148
<211> 2098
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2026)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2079)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2087)
<223> n equals a,t,g, or c

<400> 148
agccttctc cccgcgcttg ggactctgac atcttaaggc tgcacggtcg tgtccttgtc       60
tgggtgaggc catgtctgtg atccaaggtt cctggaactg acacaggaag gggctgtgaa      120
ccctaagtgg gtgtmatctc ctccraccga ggcttctmac cctggagatg gcagttactc      180
ctggccatgg ttgctgagca tgggcagaca agtgtgaggc accctactgt gttatctgcg      240
ccttcratga agtgagaccc ttggggagaa cgggctgtgg atgaaggagt ggactgcagc      300
cttggcctag ccactgggct gggatcttct gggtcatgtg actgtgtatc caggagcaga      360
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gacctagaaa tgggcctgtc tggcatttca gagtcaggca aagcaggcag ggccagggag      480
cttctgtggg tctacacaag aaggttcctg tgagggctat cagttgttgc cttctagctt      540
gctggtaact ttggcgcctc cgccaagccc tgccagactc ccctggctgt gatggcattc      600
tgtgccatcc tgccttgtcc ccagcctctg caggatgccc tccctaccca mctytycctg      660
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cttcttccca cctcaagatg aggtcctcgc cccttgtct tggcataaaa acacctttaa       780
agcatgagcc atgtgcttct ttgcccttct ctgtcctgtt ccaatcttct gcctcccagt      840
cactccctgg ggactatggg atcactgtcc ccccacctgt gtggccacac catgtgtcct      900
gtcaatccag aactgcctct gagctccagg ctgaccacag atcagccaca gcctgatgcc      960
tgcagcccca ctttgctcac ccttcccctc ccctcctcct tccttccaca cagcaagcct     1020
acctttytcc atccatgctc accatagccc ccttccttgt gacctggacc ctccattgta     1080
cctggctgag actgtcagcc tcctggagga gtggggtcca ccttcttctt gccctatgca     1140
gtgcaagctt cacttcttcac ccagcaaggt tgactcatct gcctccatgt ctctgggget     1200
ttgctgttgc cctgaaacct agctgggctg gtcttgctcc cagcttgctt cccctcctc      1260
ggatgtccct ttgcaggccc ctgtcgttcc tccggcacca gtgtccttgg ctgccatggc     1320
aagctcatca ggggcttgta ccctggtcac caagcatggt agcagctgcc tgcattgtat     1380
ctccatctgg tcactgcagg tgccaaccct tcatccccca tgttttcctg ggccatggag     1440
ggctgacctc cgtttctggg gaatgtggct gagctgtgat aaccagctac actgttgtcc     1500
ctcttttccat ggtggtgcct gctcatcttg ctgatgcaaa ctaggaagtt aggctgcatc     1560
tcggagtggc tttcgctgga gaggtgcttt gctgtctctc agactcagtc actgtgttcc     1620
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gctggaattc ctttgtggtt tgctcttctg cttctcactc ttgtattaag aaggattcca    1740
caaagggaga gtggcatccc tgctgctgct gtgccagacc agagtttcct gaggggccct     1800
gaccctaacc ctccagctca gccctgtaca cctgaccctg taaatgagtg gggtttgctg     1860
actgtaatcc ctgacaccag taaaaccaaa aggactcttg ggggctcagt gtgagagcca     1920
gggttaccta ctctgccaag tgaggacaaa ctgctaggct gtatcccata atttcaggat     1980
```

```
gagaaacatt aacaataaaa atttgtagta aacataacct catgangact aaaaaaaaaa    2040
aaaaactygg ggggggccc gtaacccatt gggcccttng ggggggngtt ttaaaatt       2098


<210> 149
<211> 1847
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (206)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (323)
<223> n equals a,t,g, or c

<400> 149
tcgacccacg cgtccgaact gaggcggcgg cgggagccgg ttggkgtctg gtcttcgcgt      60
cggccccgcg gaccagacgc tgccccggc gcggggagaa gatggtgcck agcggcctcg      120
ggcccgccac gcgccgccac gagtgagccc agcgcgaccg cgggcgtccg ccgagcagct      180
ggccccggctg ggccggggc gcgcantgcc cgccggggcg gggtggagct gatcagaata      240
atgttcagca tcaacccccct ggagaacctg aagtgtaca tcagcagtcg gcctcccctg      300
gtggtcttca tgatcagcgt aangcccatg gccatagctt tcctgaccct gggctacttc      360
ttcaaaatca aggagattaa atccccagaa atggcagagg attggaatac ttttctgcta      420
cggtcaaatg atttggactt gtgtgtatca gagaatgaaa ccctcaagca tctcacaaac      480
gacaccacaa ctccggaaag tacaatgacc agcgggcagg cccgagcttc cacccagtcc      540
cccaggccc tggaggactc gggcccggtg aatatctcag aatatctcag cctaacccatg      600
gacccactga aacccttcgg agggtattcc cgcaacgtca cccatctgta ctcaaccatc      660
ttagggcatc agattggact ttcaggcagg gaagcccacg aggagtaaa catcaccttc      720
accctgccta cagcgtggag ctcagatgac tgcgccctcc acggtcactg tgagcaggtg      780
gtattcacag cctgcatgac cctcacggcc agccctgggg tgttccccgt cactgtacag      840
ccaccgcact gtgttcctga cacgtacagc aacgccacgc tctggtacaa gatcttcaca      900
actgccagag atgccaacac aaaatacgcc caagattaca atcctttctg gtgttataag      960
ggggccattg gaaaagtcta tcatgcttta aatcccaagc ttacagtgat tgttccagat     1020
gatgaccgtt cattaataaa tttgcatctc atgcacacca gttacttcct ctttgtgatg     1080
gtgataacaa tgttttgcta tgctgttatc aagggcagac ctagcaaatt gcgtcagagc     1140
aatcctgaat tttgtcccga gaagtggct ttggctgaag cctaattcca cagctccttg     1200
ttttttgaga gagactgaga gaaccataat ccttgcctgc tgaacccagc ctgggcctgg     1260
atgctctgtg aatacattat cttgcgatgt tgggttattc cagccaaaga catttcaagt     1320
gcctgtaact gatttgtaca tatttataaa aatctattca gaaattggtc caataatgca     1380
cgtgctttgc cctgggtaca gccagagccc ttcaaccca ccttggactt gaggacctac     1440
ctgatgggac gtttccacgt gtctctagag aaggattcct ggatctagct ggtcacgacg     1500
atgttttcac caaggtcaca ggagcattgc gtcgctgatg gggttgaagt ttggtttggt     1560
tcttgtttca gcccaatatg tagagaacat ttgaaacagt ctgcaccttt gatacggtat     1620
tgcatttcca aagccaccaa tccattttgt ggattttatg tgtctgtggc ttaataatca     1680
tagtaacaac aataataccct tttttctcat tttgcttgca ggaaacatac cttaagtttt     1740
ttttgttttg ttttttgtttt tttgttttttt gttttcctt atgaagaaaa aataaaatag     1800
tcacatttta atactaccaa aaaatggaca aaaaaagtcg agggggg                   1847


<210> 150
<211> 1569
<212> DNA
<213> Homo sapiens
```

<400> 150

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gacgctgacg agagaaggcc tcttccttga gggttggtgc tgtgttgcag tgaccgtggc       60
ggattacgcc aactcggatc cggcggtcgt gaggtctgga cgagtcaaga aagccgtagc      120
caacgctgtt cagcaggaag taaaatctct ttgtggcttg gaagcctctc aggttcctgc      180
agaggaagct ctttctgggg ctggtgagcc ctgtgacatc atcgacagca gtgatgagat      240
ggatgcccag gaggaaagca tccatgagag aactgtctcc agaaaaaaga aaagcaagag      300
acacaaagaa gaactggacg gggctggagg agaagagtat cccatggata tttggctatt      360
gctggcctcc tatatccgtc ctggagacat tgtgaatttt tccctgattt gtaagaatgc      420
ctggactgtc acttgcactg ctgcctttg gaccaggttg taccgaagca ctacacgctg       480
gatgcttccc tgccttttgcg tctgcgacca gagtcaatgg agaagctgcg ctgtctccgg      540
gcttgtgtga tccgatctct gtaccatatg tatgagccat ttgctgctcg aatctccaag      600
aatccagcca ttccagaaag cacccccagc acattaaaga attccaaatg cttactttc       660
tggtgcagaa agattgttgg gaacagacag gaaccaatgt gggaattcaa cttcaagttc       720
aaaaaacagt cccctaggtt aaagagcaag tgtacaggag gattgcagtc tcccgttcag      780
tacgaagatg ttcataccaa tccagaccag gactgctgcc tactgcaggt caccaccctc      840
aatttcatct ttattccgat tgtcatggga atgatattta ctctgtttac tatcaatgtg       900
agcacggaca tgcggcatca tcagtgaga ctggtgttcc aagattcccc tgtccatggt       960
ggtcggaaac tgcgcagtga acagggtgtg caagtcatcc tggacccagt gcacagcgtt     1020
cggctctttg actggtggca tcctcagtac ccattctccc tgagagcgta gttactgctt     1080
cccatcctt gggggcagcc tcgagtgtag tccattagta atcagattcc agtttggaca     1140
gggtggctgg attgtatatc tcgttagtaa tgtacatgct cttcaggttc tagggctcct     1200
gttaggggag ggagaaatgt tgaatcaaga gggaaaacaa ctactatgat ttataaacat     1260
attttaatgt aaaaatttgc atttaaaagg agtggccctg ttttctgtgt taaaacccca     1320
tttggtgcta ttgagtttgt tcttattct tttatcccag tgaaaattgt tgatcttgct     1380
gtaggaaaa attaaactct ttgaatctcc aaacaaggaa gtttcagcat tccctttatgg     1440
atcagaggaa ccttagaggc ctgaaattgt tgcttccagt ttagctgccc ctcaaattca     1500
agtgaatatt ttccttctc cctttaccct tctccagaaa taaagcaggt gacaggggtt     1560
cagaatctt                                                            1569
```

<210> 151
<211> 1540
<212> DNA
<213> Homo sapiens

<400> 151

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cccacgcgtc cggaaggatt gaccagttaa ccaacatctt agccccatg gctgttggcc       60
agattatgac atttggctcc ccagtcatcg gctgtggctt tatttcggga tggaacttgg      120
tatccatgtg cgtggagtac gtcctgctct ggaaggttta ccagaaaacc ccagctctag      180
ctgtgaaagc tggtcttaaa gaagaggaaa ctgaattgaa acagctgaat ttacacaaag      240
atactgagcc aaaaccctg gagggaactc atctaatggg tgtgaaagac tctaacatcc      300
atgagcttga acatgagcaa agccctactt gtgcctccca gatggctgag ccttccgta       360
ccttccgaga tggatgggtc tcctactaca accagcctgt gtttctggct ggcatgggtc      420
ttgctttcct ttatatgact gtcctgggct ttgactgcat caccacaggg tacgcctaca      480
ctcagggact gagtgggtc catcctcagt attttgatgg gagcatcagc tataactgga      540
ataatgggaa ctgtagcttt tacttggctca cgtcgaaaat gtggtttggt tcggcaggtc      600
tgatctcagg attggcacag ctttcctgtt tgatcttgtg tgtgatctct gtattcatgc      660
ctggaagccc cctggacttg tccgtttctc cttttgaaga tatccgatca aggttcattc      720
aaggagagtc aattacacct accaagatac ctgaaattac aactgaaata tacatgtcta      780
atgggtctaa ttctgctaat attgtcccgg agacaagtcc tgaatctgtg cccataatct      840
ctgtcagtct gctgtttgca ggcgtcattg ctgctagaat cggtctttgg tcctttgatt      900
taactgtgac acagttgctg caagaaaatg taattgaatc tgaaagaggc attataaatg      960
gtgtacagaca ctccatgaac tatcttcttg atcttctgca tttcatcatg gtcatcctgg     1020
ctccaaatcc tgaagctttt ggcttgctcg tattgatttc agtctccttt atgggaaggc     1080
gccacattat gtatttccga tttgcccaaa atactctggg aaacaagctc tttgcttgcg     1140
gtcctgatgc aaaagaagtt aggaaggaaa atcaagcaaa tacatctgtt gtttgagaca     1200
gtttaactgt tgctatcctg ttactagatt atatagagca catgtgctta ttttgtactg     1260
cagaattcca ataaatggct gggtgtttg ctctgttttt accacagctg tgccttgaga     1320
```

```
actaaaagct gtttaggaaa cctaagtcag cagaaattaa ctggattaat ttcccttatg      1380
ttgagggcca tggraaaaaa attgggaaaa ggaaaaactc agttttaaat acgggagact      1440
ataatggata acactgratt cccctatttc tcatgagtag atacaatctt acgtaaaaga      1500
gtggttagtc acgtgaattc agttatcatt tgacagattc                            1540


<210> 152
<211> 1719
<212> DNA
<213> Homo sapiens

<400> 152
tacttatgag gtcaattgga aataagaaca ccattttact gggtctagga tttcaaatat        60
tacagttggc atggtatggc tttggttcag aaccttggat gatgtgggct gctggggcag       120
tagcagccat gtctagcatc acctttcctg ctgtcagtgc acttgtttca cgaactgctg       180
atgctgatca acagggtgtc gttcaaggaa tgataacagg aattcgagga ttatgcaatg       240
gtctgggacc ggccctctat ggattcattt tctacatatt ccatgtggaa cttaaagaac       300
tgccaataac aggaacagac ttgggaacaa acacaagccc tcagcaccac tttgaacaga       360
attccatcat ccctggccct cccttcctat ttggagcctg ttcagtactg ctggctctgc       420
ttgttgcctt gtttattccg gaacatacca atttaagctt aaggtccagc agttggagaa       480
agcactgtgg cagtcacagc catcctcata atacacaagc gccaggagag gccaaagaac       540
ctttactcca ggacacaaat gtgtgacgac tgaaatcagg aagattttc tatcagcacc        600
caggtcttag ttttcacctc tagttctgga tgtacattcc atttccatcc acagtgtact       660
ttaagattgt cttaagaaat gtatctgcat gaactccgtg ggaactaaag gaagtgggaa       720
cttagaacca gacagttttc caaagatgtt acaatttctt ttgaaaaacc ttttgtttat       780
tagcaccaat ttctygccac taagctattt gttttattat acatccttta attaaaaact      840
atatatgtaa cttcttagat attagcaaat gtctctgcta ccatttcctt aaggtgttga      900
gctttaactc tatgctgact cagtgagaca cagtaggtag tatggttgtg gacctatttg      960
ttttaacatt gtaaaatttt gagtcagatt ttaatattgt aaaatcttgg gtcaaataat     1020
tcaaagcctt aatgcagatg cactaaaaca aagaaatggt aaatgaattg tttgcattta     1080
aaaaaaaaaa ctcttaagaa aactgtacta aatctgaatc atgttttgag cttgtttgca     1140
gtacttttaa acattattca ctactgtttt tgaagtgaga aagtatcagc catttagcat     1200
ttaagttggg gtatttagag cctgtaatct aaatgctggc tcaaatttat tccccagcta     1260
cttcttatac cactattctt ttaatgtttg cataatcata agcacctcaa cacttgaata     1320
cataatctaa aaattatata gtaaagctgg tagccttgaa aatgtcagtg tgatatctat     1380
tatgtagata aatatatata gtggccttc aggactgtca cagtaacact ttatttacag     1440
agctaatgtt tgtcctaaat tttcaggacc ctagaggaga gctttataca attaccgatg     1500
tgaatttctc taaagtgtat attttgtgt ccagttatat tatttaaaaa agtgttactt     1560
tgtaaaaatt gtatataaag aactgtatag tttacactgt tttcatcttg tgtgtggtta     1620
ttgcttaatg cttttaaac ttggaacact cactatggtt aaataaggtc ttaaaagaaa     1680
tgtaaatatt ytgttaataa agttaaatat tttaatgat                            1719


<210> 153
<211> 863
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (817)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (859)
<223> n equals a,t,g, or c
```

```
<400> 153
ggcacgaggg aagccgggac gatgtccgca tgacaaccga cgttggagtt tggaggtgct        60
tgccttagag caagggaaac agctctcatt caaaggaact agaagcctct ccctcagtgg       120
tagggagaca gccaggagcg gttttctggg aactgtggga tgtgcccttg ggggcccgag       180
aaaacagaag gaagatgctc cagaccagta actacagcct ggtgctctct ctgcagttcc       240
tgctgctgtc ctatgacctc tttgtcaatt ccttctcaga actgctccaa aagactcctg       300
tcatccagct tgtgctcttc atcatccagg atattgcagt cctcttcaac atcatcatca       360
ttttcctcat gttcttcaac accttcgtct tccaggctgg cctggtcaac ctcctattcc       420
ataagttcaa agggaccatc atcctgacag ctgtgtactt tgccctcagc atctcccttc       480
atgtctgggt catgaactta cgctggaaaa actccaacag cttcatatgg acagatggac       540
ttcaaatgct gtttgtattc cagagactag cagcagtgtt gtactgctac ttctataaac       600
ggacagccgt aagactaggc gatcctcact tctaccagga ctctttgtgg ctgcgcaagg       660
agttcatgca agttcgaagg tgacctcttg tcacactgat ggatactttt ccttcctgga       720
tagraggcca catttgctgc tttgcagggg agagttgggc cctatgcatg gggcaaaaca       780
ggtgggattt tccaaggaa gggttcagaa ttaggcntgt tgtttcagcc atttccaagg       840
aagggaggg gtttccctnc cct                                                863
```

```
<210> 154
<211> 1101
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (713)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1055)
<223> n equals a,t,g, or c
```

```
<400> 154
aacagcaaaa aagaatgatt tcttctgaaa ttgtggaaca tgaggattca agttttatt         60
ttgttactag gtgctggagg aacatcccag ttcacaaagc cccatctct tcctctggag       120
ccagagcctg cggtggaatc aagtccaact gaaacatcag aacaaataag agagaaataa       180
gaatagaatg aatgacccca aaatarggtt ttcttgggcg aggatgtgct ggattaggaa       240
aggtgacatg acacaggcag agcagagtgg cacccaccac agaatacagt gtgtgttatt       300
acgaggagcc agcagttgag cctaaggtcc ttctacctac ctggtattgg catttgaggt       360
cggaaaccct ctactgcccc ataagccagg aaaagtgaaa agagaacaca gttccttta          420
gaactggcag caaggcttga ggccttatgt atgtagctga gtcagcaagg tacatgatgc       480
tgtctgcttt caaaaggact tttctctcct agctgactga ctccttcctt agttcaagga       540
acagctgaga cagacctctg ctgagtagct ctgtgatgac aaagccttgg tttaactgag       600
gtgatcctca ggttgtgagg tttattagtc cccaaggcaa acacaaatat tagattaata       660
atccaactt aatagtatac atttaaaaga aaaaaaacaa aagccctgga agnttgaggc       720
caagcctgct gagtattgca gctgcatttg cccaaaggga atccagaaca agtccctccc       780
tgtatttgt tcttgagagg ggtcagtcta gaagctagat cctatcagga tgaggagcag       840
cagcccaggg cttgtctgga tcagcaccaa cgattttaaa gaaaaaagga agagtttctt       900
agatgagtaa ttgttattga agatagtcag tgataaccac tgaccagatg ctatcaatac       960
actatgtgtc ctttttagaa taaagattac atatcatcat tcctttgggg aaaattgtta      1020
ttcaggtata aaaacaagag atttataataa aaaantaaaa gaaccctaaa aaaaaaaac      1080
ctcgtgccga attccctgca g                                                1101
```

```
<210> 155
<211> 2031
<212> DNA
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<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1855)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2016)
<223> n equals a,t,g, or c

<400> 155
```
caattaaccc gtttgaggcc taggttgttt ggcaagcccc nggcctaaag ttttaattcg        60
gcagagccaa gggcctgaaa ggaagggaaa ggggagggta gcgggagggt agcaggtgag       120
ttcctagggc tggaaggttt agcagcagcc tggtgcagtg ccctgtcatc aagacaaacc       180
cacggtcctc ctgggtgcct accaagcttg gtttgtacaa aagcaaggtg ggagtctatt       240
tttgtacatg agatacatca cacttacctg tgggccagta ttgtgaagtg agtctgagtt       300
gtttacactg atgccttccc tgcccaccac aaattgtgta catagtcttc agaatgatac       360
caccccttcc cccagctccc aaccaagagc tggttctagg cctgtgttat atgtcatatt       420
tagccgtttt atatatgacc tttgatttct gttgtttgta ttttagcaca gtgtatgcac       480
cttcatttaa atacatctgt gtgcatacag atacgcatat atgtgtgtgc gtatgcatat       540
atctctcatc tgtagtttcc aagagttcag ctgaagcaga tggagtcctg cagcccagga       600
gacaccctgc atccctgcta atagtgtttg ccacaagtat tagtgagtct tccttattaa       660
tattttcatt tcagaagact gaagcaaagc tgatagtgtt tgctgtttct ttggcagcta       720
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agtattaagc cccctttttg cttggtggta ctctgtctgt gcctgtgtgt gtgtgtgata       840
gtcactcttg catggcttcc atgtctggtt tgtggcattt ggggataagt gctgaaccag       900
agcatttgca gtttgtttga ggcctcgttg ccaatgatag atcactcctg ttgacctggt       960
atgtctgctt gcttgctgct tttccttgct ttctcttgga agaggaaagg actctggtca      1020
ggcccaggct gagtgagatg agctgcagct ggctcatggc cttcttagag cagagagagg      1080
agtatgtcat tttactaagt tcctaaacaa acatttatgc aggcaacact ccttgcagat      1140
ccagaaactg aggcacaata gggttatgac ttgctcaaga atatgtagct gctagggggt      1200
aaatcaaggc atcacaattt ctgttcagcg ggcaggaata ggctgtgaat tgctagcact      1260
tttttttaa gcaattactt tttgacttgt tcctctgaaa gtgcaagagg cgtacacctt      1320
tcccaaatgt agactagaat ctgcaggatg ccacccactg tatagttctg ctttcccaga      1380
gaggaagaac ttttagaaac caaatgatct taattgttat tgcccacccc tggcttttcc      1440
gggtagaaaa ttcacagtag gaatgattgt taagagagag tgcttggaac catgggttaa      1500
caggaaaggc tacctaactt cacatatctg caaccagagc agccaccaag cattacttag      1560
cagcaggaaa atgattgtat ttgagttcct gtgtgtccaa aactgaggca ccatgttctt      1620
tgaaaacatg ccacctcaag gctgggcgcg gtggctcaca cctgttaatc ccagcacttt      1680
gggaggccga ggcgggcgga tcaccggagt cggggagttt gagaccagcc tggaccaaca      1740
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tataatctca gctacttggg agggytgagg caggrgaatt gcttgaaccc rgganggcgg      1860
aggtttgcgg ttgagttgag gatcgtgcca ttgcacttcc gggccttggg gcaacaacag      1920
caaaaaytcc gtcttcaamw mrtgccgaat tcgatatcaa gcttatcgat accgtcgacc      1980
tcgagggggg gcccggtacc caattcgccc tatagngatc gtattacaat c              2031
```

<210> 156
<211> 1981
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (475)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (484)
<223> n equals a,t,g, or c

<400> 156
```
cctgcaccct gagcccttca cccctccgag ttcccccag gttggcttcc ttcgattcct      60
tttcttggta tcaacgtttg attggaagaa caaccccctc tttgtcaacc tcaataatga     120
gctcactgtg gaggagcagc tcgggcacag ctcmccgtya tggtcattgt tacccccaa      180
gaccgcaaaa actctgtgtg gacacaggat ggaccctcag cccagatcct gcagcagctt      240
gtggtcctgg cagctgaagc cctgcccatg ttagagaagc agctcatgga tccccgggga     300
cctggggaca tcaggacagt gttccggccg cccttggaca tttacgacgt gctgattcgc     360
ctgtytcctc gccatatccc gcggcaccgc aggcttgtgg actcgccagy tgcctccttc     420
tgccggggcc tgctcagcca gccgggggcc tcatccctga tgcccgtgct gggtnatgat     480
cctnctcagc tctatctgac gcagctcagg gaggcctttg gggatctggc cctttcttc     540
tatgaccagc atggtggaga ggtgattggt gtcctctgga agcccaccag cttccagccg     600
cagccctca aggcctccag cacaaaggg cgcatggtga tgtctcgagg tggggagcta     660
gtaatggtgc ccaatgttga agcaatcctg gaggactttg ctgtgctggg tgaaggcctg     720
gtgcagactg tggaggcccg aagtgagagg tggactgtgt gatcccagct ctggagcaag     780
ctgtagacgg acagcaggac attggacctc tagagcaaga tgtcagtagg atgacctcca     840
ccctccttgg acatgaatcc tccatggagg gcctgctggc tgaacatgct gaatcatctc     900
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gcccatgtag tctcctgggc ctcaccatcc cagaagagga gtgggagcca gctcagagaa    1020
ggaactgaac ccaggagatc catccaccta ttagccctgg gcctggacct ccctgcgatt    1080
tcccactcct ttcttagtct tcttccagaa acagagaagg ggatgtgtgc ctgggagagg    1140
ctctgtctcc ttcctgctgc caggacctgt gcctagactt agcatgccct tcactgcagt    1200
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tgagcagtgg aaaggggcta tatgtgtatg aatagaccac attgaaggag cacaatgccc    1320
tcctgtgttg atgccacttc ccagggtgga gacagtggaa aagaaccgag gacaggaaag    1380
gattgggtag gtgaaggggt caggggactg gtagtcaccc aatcttggag aggtgcaaaa    1440
agcactgggg gctaccgtt agctgcatct gccctggctg tttgcccgtt catgtcacaa    1500
actgccacta ctatgtacct gcagtggggt tgcagagatg ggggagactc aagtcttact    1560
cccaggagc tcccagggcc caaggaggag aatgctgcct cctttcagtc tggtctacac    1620
ccactttctg gtagcctctc tgcttcctgt aattctggct gtttttccag actcagctca    1680
aatagtgccc ctccttaagc ccatccctcg ccccccagcct gggtgatct ttccctcctc    1740
tgaactatta gagcagttac tgtctgttca gttcgtttgg caggcacaca cagtggcata    1800
aattctattg ttttgaactc tgatttaaaa ttaaattgca gctgggcgtg gtggctcatg    1860
cttgtaatcc caacacttag ggagtmaggr gaatcacttg ascycaggag tyctagacca    1920
atctgggcaa magagagacc ccatctcttt taaataaaaa gttaaattgc ttaaaaaaaa    1980
a                                                                    1981
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<210> 157
<211> 915
<212> DNA
<213> Homo sapiens

<400> 157
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gaattcggca cgagcgcggc catggcgctc ctgctttcgg tgctgcgtgt actgctgggc      60
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gagccggatga atgccctgtt cgtcgagttt gctgaggtgt tcccgctgaa ggtatttggc     180
taccagccag atccctgaa ctaccaaata gctgtgggct ttctggaact gctggctggg     240
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ttgctgctgg tcatgggccc accgatgctg caagagatca gtaacttgtt cttgattctg      300
ctcatgatgg gggctatctt cacccttggca gctctgaaag agtcactaag cacctgtatc      360
ccagccattg tctgcctggg gttcctgctg ctgctgaatg tcggccagct cttagcccag      420
actaagaagg tggtcagacc cactaggaag aagactctaa gtacattcaa ggaatcctgg      480
aagtagagca tctctgtctc tttatgccat gcagctgtca cgacaggaac atggtagaac      540
acagagtcta tcatcttgtt accagtataa tatccagggt cagccagcgt tgaaagagac      600
attttgtcta cctggcactg ctttctcttt ttagctttac tactcttttg tgaggagtac      660
atgttatgca tattaacatt cctcatgtca tatgaaaata caaaataagc agaaaagaaa      720
tttaaatcaa ccaaaattct gatgccccaa ataaccactt ttaatgcctt ggtgtaagta      780
tacctctgaa cttttttctg tgcctttaaa cagatatata tttttttttwa atgaaaataa      840
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aaaaaaaaaa ctcga                                                         915
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<210> 158
<211> 2117
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2072)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2113)
<223> n equals a,t,g, or c

<400> 158

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gctgctgctg gcgccgtccg tggtgcaggc ggtggagccc atcagcctgg gactggccct      120
ggccggcgtc ctcaccggct acatctaccc gcgtctctac tgcctcttcg ccgagtgctg      180
cgggcagaag cggagcctta gccgggaggc actgcagaag gatctggacg acaacctctt      240
tggacagcat cttgcaaaga aaatcatctt aaatgccgtg tttggtttca taaacaaccc      300
aaagcccaag aaacctctca cgctctccct gcacgggtgg acaggcaccg gcaaaaattt      360
cgtcagcaag atcatcgcag agaatattta cgagggtggt ctgaacagtg actatgtcca      420
cctgtttgtg gccacattgc actttccaca tgcttcaaac atcaccttgt acaaggatca      480
gttacagttg tggattcgag gcaacgtgag tgcctgtgcg aggtccatct tcatatttga      540
tgaaatggat aagatgcatg caggcctcat agatgccatc aagccttttcc tcgactatta      600
tgacctggtg gatggggtct cctaccagaa agccatgctc atatttctca gcaatgctgg      660
agcagaaagg atcacagatg tggctttgga ttctggagg agtggaaagc agaggggaga      720
catcaagctc aaagacattg aacacgcgtt gtctgtgtcg gttttcaata acagaaacag      780
tggcttctgg cacagcagct taattgaccg gaacctcatt gattattttg ttccttctcct      840
ccccttggaa tacaaacacc taaaaatgtg tatccgagtg aaatgcagt cccgaggcta      900
tgaaattgat gaagacattg taagcagagt ggctgaggag atgacatttt tccccaaaga      960
ggagagagtt ttctcagata aaggctgcaa aacggtgttc accaagttag attattacta     1020
cgatgattga cagtcatgat tggcagccgg agtcactgcc tggagtttgga aaagaaacaa     1080
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aggccaccca gggaccacgg gcgaggacgt gaagcctccc gaacacgcac agaaggaagg     1260
agccagctcc cagcccactc atcgcagggc tcatgacttt ttacaaatta tgttttaatt     1320
ccaagtgttt ctgtttcaag gaaggatgaa taagttttat tgaaatgtg gtaactttat     1380
ttaaaatgat ttttaacatt atgagagact gctcagattc taagttgttg gccttgtgtg     1440
tgtgttttt ttttaagttct catcattatt acatagactg tgatgtatct ttactggaaa     1500
tgagcccaag cacacatgca tggcatttgt tccacaggag ggcatccctg gggatgtggc     1560
tggagcatga gccagctctg tcccaggatg gtcccagcgg atgctgccag gggcaktgaa     1620
gtgtttaggt gaaggacaag taggtaagag gacgccttca ggcaccacag ataagcctga     1680
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aacagcctct ccaagggttt tcaccttagc aacaatggga gctgtgggag tgattttggc    1740
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ttgccagtca ctccgttttg caaaaggtgg cccttcactg tccattccaa atagcccaca    1860
cgtgctctct gctggattct aaattatgtg aattttgcca tattaaatct tcctcattta    1920
tactattatt tgttacgttc aatcagaatc cccgaaacct cctataaagc ttagctgccc    1980
cttctgagga tgctgagaac ggtgtgtttc tttataaatg caaatggcta ccgtttttaca   2040
ataaaatttt gcatgtgcaa aaaaaaaaaa anaaaaaaaa aaaatccggg ggggggccg      2100
gtaaccaatt tgncccc                                                   2117
```


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<210> 159
<211> 2395
<212> DNA
<213> Homo sapiens
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<400> 159
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agaagctaaa tacaattgga aactggtaag cactagtttt actccaaagg agtaggatca    120
ttcagattta ctccaataaa agtatgcaac cctaagcaa agcttttctt catttaaaag      180
gagaaaaaaa aaaaacctat acagtagtct ttcctatgt tcattgcaca aaatgagttc     240
tgctttaga actttgacac tcaatggtta attttacaat ttaagattcc aactttataa     300
cctttttct actccaaaac acccttgtaa agtttttctt taggatggtg taaaaaccag     360
catttctgca caattcactg gaattttttt ctttgtaata aaaatctctt ctctgtaaaa     420
ccaaaacaa aacaaaacaa aacaaaacaa aaccaaaaga aaagtcctct acctatcatg      480
gtttctgcag ctatgcatgt atttctgttt tatagctgct ttatagctac ttcagactcc     540
agatctgctt taatgtgtat aactgcatcc acacgcagca gaatactctt acaatagcaa     600
cttgggaaa gagatctaca aaaaaaaaat acatgagtac caggaaacaa acatggccca     660
gtaaaatatg aggcaaaaat gcctacaatg agatgcgttt ttcatttaag atttctttcc     720
catggttgta ttttcttttt ttaaaccagt tctggtcatt agaatgtatc tgacagtgct     780
ctggaacaac tgtgattata gcaaagttat tgttttttaa aatgttattt atacctgtta     840
cattcacttc tcaccctcta aatactgatg acagatgtca aagaggcaaa aaccagcaca     900
aatgggaaga ccataaaaat gagtatcacc ttgtgcttcc agatacattt aagcatttca     960
gtgtacaata gtcctttcat ttcacatttt tagtaagata ctgatgcagt gcagcaaata    1020
tgcaaagcat cttctttcac acagtccgtg cacgacatct aattttttgt taagttctga    1080
gataaaaatg atttaaaaaa atccaggatg aacaagtttc aaaatgcata gtgttctgtg    1140
catgagtcca ttttctttaa actctgaaag aataaagtgg taagaaaaca agaaaaaaaa    1200
ctgctgctgc attctctgat cttctccatt ttgctggtca gtactctact ctggcatata    1260
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taaaagctct agggaacttt ccaaggaata gctggaatct gcacaccctt tcaggatatt    1740
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agattcttt ttctttctaa gctgagcacg tagtctgttc agagcttgtt tcttccggga    1920
gtttgggtcc cccattttga aatacaggtg gtactaaagc ctttggaaat tgtccactaa    1980
actatgggcc acttttctt aagactcaag tacaacagaa acaagtcmtt tttttttcctg    2040
ctaatatgat tgattacgca aaatcacgac tataacccaa aaactgcacc ttctgtcaat    2100
attagcagac tgtcatatta cagggtcaag aaacaaaagc tgctgtccag tcatgttttgg   2160
acaataacgt ttggggtcag acgggaaaaa gggaggaaag aaaggaaaga aagaggagaa    2220
aataactaac tttctggaaa acacatttgg cttaactgcc aaaataaaagg ctttgcggag   2280
aaatgaaaag cctataatca ggatttaggt gtgcaataaa acacagctga caccagacca     2340
atccctaaaa tccatccgga ttttcccccc tttttagaaa agggattaag gaaca          2395
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<210> 160
<211> 2120
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (975)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1405)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2120)
<223> n equals a,t,g, or c

<400> 160
cccggatac cgcctgacgt agtgccaatc acacctctcg cgtctcggcg cctcggaggc      60
taatgaggac gcctggcgaa acgcagtaac ggatttccgg gtggaccttc gctttacggc     120
tcgtgagttc ttccgcccaa cccagaggaa gcgggagagc agtttacgac agcgccggtc     180
gtgtttacgg cggcgcccgc tgcgcgcgca tgtttcctct tttcctggtt tctcaagagt     240
gctgctgcta acgcggtccc cggcacgcac catctgttgc catcccggcc ggccgaggca     300
ttgcagattt tggaagatgg caaagttcat gacaccogtg atccaggaca acccctcagg     360
ctggggtccc tgtgcggttc ccgagcagtt tcgggatatg ccctaccagc cgttcagcaa     420
aggagatcgg ctaggaaagg ttgcagactg gacaggagcc acataccaag ataagaggta     480
cacaaataag tactcctctc agtttggtgg tggaagtcaa tatgcttatt tccatgagga     540
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gaatcgaatg agatttgccc agaggaacct ccgcagagac aaagatcgtc ggaacatgtt     660
gcagttcaac ctgcagatcc tgcctaagag tgccaaacag aaagagagag aacgcattcg     720
actgcagaaa aagttccaga aacaatttgg ggttaggcag aaatgggatc agaaatcaca     780
gaaacccga gactcttcag ttgaagttcg tagtgattgg gaagtgaaag aggaaatgga     840
tttctctcag ttgatgaaga tgcgctactt ggaagtatca gagccacagg acattgagtg     900
ttgtgggggcc ctagaatact acgacaaagc ctttgaccgc atcaccacga ggagtgagaa     960
gccactgcgg asatncaagc gcatcttcca cactgtcacc accacagacg acctgtcat     1020
ccgcaagctg gcaaaaactc aggggaatgt gtttgccact gatgccatcc tggccacgct     1080
gatgagctgt acccgctcag tgtattcctg ggatattgtc gtccagagag ttgggtccaa     1140
actcttcttt gacaagagag acaactctga ctttgacctc ctgacagtga gtgagactgc     1200
caatgagccc cctcaagatg aaggtaattc cttcaattca ccccgcaacc tggccatgga     1260
ggcaacctac atcaaccaca atttctccca gcagtgcttg agaatgggga aggaaagata     1320
caacttcccc aaaccccaacc cgtttgtgga ggacgacatg gataagaatg aaatcgcctc     1380
tgttgcgtac cgttaccgca gtggnaagct tggagatgat attgacctta ttgtccgttg     1440
tgagcacgat ggcgtcatga ctggagccaa cgggaagtg tccttcatca acatcaagac     1500
actcaatgag tgggattcca ggcactgtaa tggcgttgac tggcgtcaga agctggactc     1560
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gacctgctgt gctttgctgg ctggatctga gtacctcaag cttggttatg tgtctcggta     1680
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gtttgccagc cagatcaacc tgagcgtgga gaatgcctgg ggcattttac gctgcgtcat     1800
tgacatctgc atgaagctgg aggagggcaa atacctcatc ctcaaggacc ccaacaagca     1860
ggtcatccgt gtctacagcc tcccctgatg gcaccttcagc tctgatgaag atgaggagga     1920
agaggaggag gaagaagagg aagaagaaga ggaagaaact taaaccagtg atgtggagct     1980
ggagtttgtc cttccaccga gactacgagg gcctttgatg cttagtggaa tgtgtgtcta     2040
acttgctctc tgacatttag cagatgaaat aaaatatata tctgtttagt cttaaaaaaa     2100
aaaaaaaaaa aaaaaaaaan                                                 2120
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<210> 161
<211> 900
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (495)
<223> n equals a,t,g, or c

<400> 161
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cctccaccct cacctgtrac tcaggaccac agaagcaaaa gttctcactc aaactggatg      120
ccaaggatgg gcgcttgttc aatgcagaga acttcttcca gcgggccgcc aagcctctgc      180
aagtcaacaa gtggaagaag ctgtactcga ccccactgct ggccatccct acctgcatgg      240
gtttcggtgt tcaccaggac aaatacaggt tcttggtgtt acccagcctg gggaggagcc      300
ttcagtcggc cctggatgtc agcccaaagc atgtgctgtg cagagaggtc tgtgctgcag      360
gtggcctgcc ggctgctgga tgccctggag ttcctccatg agaatgagta tgttcatgga      420
aatgtgacag ctgaaaatat ctttgtggat ccagaggacc agagtcaggt gactttggca      480
ggctatggct tcgcnttccg ctattgccca agtggcaaac acgtggccta cgtggaaggc      540
agcaggagcc ctcacgaggg ggaccttgag ttcattagca tggacctgca caagggatgc      600
gggccctccc gccgcrgcga cctccagagc ctgggctact gcatgctgaa gtggctctac      660
gggtttctgc catggacaaa ttgccttccc aamamtgagg acatcatgaa gcaaaaacag      720
aagtttgttg ataagccggg gcccttcgtg ggaccctgcg gtcactggat caggccctca      780
gagaccctgc agaagtacct gaaggtggtg atggccctca cgtatgagga gaagccgccc      840
tacgccatgc tgaggaacaa cctagaagct ttgctgcagg atctgcgtgt gtctccatat      900


<210> 162
<211> 1003
<212> DNA
<213> Homo sapiens

<400> 162
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tcagcctctc ttactgtact ctccgggaat gttaaccttt ctatttcag cctgtgccac       120
ctgtctaggc aagctggctt ccccattggc cctgtgggt ccacagcagc gtggctgccc       180
cccaggccca ccgcttcttt cttgatcctc tttccttaac agtgacttgg gcttgagtct      240
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ccagggtgtt ttccactagt cactactgtc ttctccttgt agctaatcaa tcaatattct      420
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ggggaaagag gataatcagt gagcactgtt ctgctcagag ctcctgatct accccacccc      540
ctaggatcca ggactgggtc aaagctgcat gaaaccaggc cctggcagca aacctgggaa      600
tggctggagg tgggagaaa cctgaacttc tctttccctc tccctcctcc aacattactg       660
gaactctatc ctgttaggat cttctgagct tgtttccctg ctgggtggga cagaggacaa      720
aggagaaggg agggtctaga agaggcagcc cttctttgtc ctctggggta aatgagcttg      780
acctagagta aatggagaga ccaaaagcct ctgatttta atttccataa aatgttagaa      840
gtatatatat acatatatat atttctttaa attttgagt cttgatatg tctaaaaatc       900
cattccctct gccctgaagc ctgagtgaga cacatgaaga aaactgtgtt tcatttaaag      960
atgttaatta aatgattgaa acttgaaaaa aaaaaaaaaa aaa                       1003


<210> 163
<211> 2196
<212> DNA
<213> Homo sapiens
```

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<220>
<221> SITE
<222> (1837)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1840)
<223> n equals a,t,g, or c

<400> 163
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gggaaacatc agcatatgca tgaccgagat gacctctatg ctgagcagat ggaacgagaa     120
atgaggcaca aactgaaaac agcctttaaa aatttcattg agaaagtaga ggctctaact     180
aaggaggaac tggaatttga agtgcctttt agggacttgg gatttaacgg agctccctat     240
aggagtacct gcctccttca gcccactagt agtgcgctgg taaatgctac ggaatggcca     300
cctttgtgg tgacattgga tgaggtagag ctgatccact ttragcgggt ccagtttcac     360
ctgaagaact ttgatatggt aatcgtctac aaggactaca gcaagaaagt gaccatgatc     420
aacgccattc ctgtagcctc tcttgacccc atcaaggaat ggttgaattc ctgcgacctg     480
aaatacacag aaggagtaca gtccctcaac tggactaaaa tcatgaagac cattgttgat     540
gaccctgagg gcttcttcga acaaggtggc tggtcttttcc tggagcctga gggtgagggg     600
gaagatgact atgaagagga agaggaggac agtgatgaag attattcatc agaagcagaa     660
gagtcagact attctaagga gtcattgggt agtgaagaag agagtggaaa ggattgggat     720
gaactggagg aagaagcccg aaaagcggac cgagaaagtc gttacgagga agaagaagaa     780
caaagtcgaa gtatgagccg gaagaggaag gcatctgtgc acagttcggg ccgtggctct     840
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tttggccctg agctccattc ttcctccagc caacccctga aaatttaca tgacatagaa     960
actgtatttt tccttttcgtt ttcatttgaa gttttgccat ttgtgtttat gggtttaggg    1020
ggccatttgt gtggaccaat ctactcgggg aattccaggc ccaccaggac acgtgccaat    1080
ggcccccattc agatggcaag ggaggaggtg ttcttgaaga caggaggaag ctcccgctgt    1140
taataaatat tgtttcattc ttctctcttc ctgtcacctt ctgccaagac attgatggct    1200
tctgacatct tatttggtgt ttcaaagctg tatttccaag acagtggtac aaggtgaccc    1260
ttaattaccc gtatcatggt tcttgaccag cacattcaat cctccaacct accctactgc    1320
catgaccttc cgcacatctc taagtttttat ctttgcaata ctcaaggttc tcggaaattt    1380
gctaatggtt gtgataaacc atacagcttg agccagtgag gcagattggg ctggtgcctt    1440
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ggtacaatga tagaaggcaa aattgccact gtcttcttttt ttttctcata tatctaagga    1620
agatatatca agatgtgcct catgtaccgc ttctagtgaa atgtagagga aggctcaaag    1680
gagtcaacat ttagatctgg aagggacaag tcatgccttg ggcctagaat accctgatga    1740
gaaaaagaga gaggaaggga ggccatatct acaacancan cctctcggca ctgctgctcc    1800
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caagtatttg gggagtttat cttgccatcc tccccttctg gttctctgca cccacctgtc    1920
ccactgcagt tccttccgtg ctctgtgact ttaagagaag aaggggggag gggtcccgga    1980
ttttatgttt gtttgttttt tctccttagc agtaggacct gatattttca attttggaag    2040
aactaaaaga tgaataaact gggtttttttt tgttgtttgt ttttgtaaaa aaaaaaaaa    2100
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa                               2196


<210> 164
<211> 1945
<212> DNA
<213> Homo sapiens

<400> 164
gcacagagtc gggcggacgg acaggagag gaggagaggg ggtctgcgcg cggccgctac       60
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ccccccccg ccccgmagg acgcgcctyc cagccagccc gactyctagg aggaggggag    180
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cggaaaccaa ccaaaccgtg cgctgtgacc cattgctgtt ctctgtatcg tgatctatcc   1860
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<210> 165
<211> 2933
<212> DNA
<213> Homo sapiens

<400> 165

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<210> 166
<211> 2243
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (57)
<223> n equals a,t,g, or c

<400> 166
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gcagtttctc gtgtataatg gtgtctatca gtatacatcc ccagatttcc tctatattcg    180
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tgagagcaag gaagattttg gaagaaaatc tgactgtgga ttatgacaaa gattatcttt    360
tttcttaagt aatctattta gatcgggctg actgtacaaa tgactcctgg aaaaaactct    420
tcacctagtc tagaataggg aggtaggagaa tgatgacttta ccctgaagtc ttcccttgac    480
tgcccgcact ggcgcctgtc tgtgccctgg agcattctgc ccaggctacg tgggttcagg    540
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<210> 167
<211> 1816
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (14)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (914)
<223> n equals a,t,g, or c

<220>
<221> SITE

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<222> (1808)
<223> n equals a,t,g, or c

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ggtacccnat tcgccg                                                      1816


<210> 168
<211> 945
<212> DNA
<213> Homo sapiens

<400> 168
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gaaccacca accaggggca ggatagcctg aagaaacatc tacacgcaga aatcaaagtt         180
attgggacta tccagatctt gtgtggcatg atggtattga gcttgggggat cattttggca      240
tctgcttcct tctctccaaa ttttacccaa gtgacttcta cactgttgaa ctctgcttac       300
ccattcatag gacccttttt ttttatcatc tctggctctc tatcaatcgc cacagagaaa       360
aggttracca agcttttggt gcatagcagc ctggttggaa gcattctgag tgctctgtct       420
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cagtgtgagt tggacaaaaa taatatacca acaagaagtt atgtttctta cttttatcat      540
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tggaaacagg cttactctga cttccctggg agtgtacttt tcctgcctca cagttacatt      720
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gttaaccatt atagaaaagc aaagcttgag tttcctaaat gtaagctttt aaagtaatga      900
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```
acattaaaaa aaaccattat ttcactgtca tttaaagata atgtg                              945
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<400> 169
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ttactgcgcg tccgaatggt caaccttcaa gtggaagatt ctggactgta tcagtgtgtg         360
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ctgagtaaga gctggtctt ctctgtcctg tttgctgtca cgctgaggtc atttgtaccc         720
taggcccacg aacccacgag aatgtcctct gacttccagc cacatccatc tggcagttgt         780
gccaagggag gaggaggag gtaaaggca gggagttaat aacatgaatt aaatctgtaa         840
tcaccrgcta aaaaaaaaaa aaaaaaaacn cgancctngg ttttcagctc catcagctcc         900
tt                                                                         902
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<400> 170
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gtttactctt gtttttgactt tgttttaatg cttcctaaga cccaagtgcc tcctgctgtt         300
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<210> 171
<211> 2100
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (149)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (164)
<223> n equals a,t,g, or c

<400> 171
tactttttaga tttactgcct tcaaaaagtg cctattctga gcaacataaa cgttattcct     60
tacatatgta tgtacacacg gtacccagag tcgtactgtg gcagccttca aaaacatacc     120
atcagaaaga gtaggtgctg agataaggna actttgccaa atgnaagaaa gtcactcact     180
tccaatatcc cctcttcaag cggctaccgt graasgggct gcaaacacat tccctgagca     240
tcccttgctg atacagcttc tttatattta tatcctactg gatggtagca tattgctaag     300
gtttcctgta ctctgcttca agggaatgta agytttattg cattgaaaca tttaggaaaa     360
aaaaagatgt ttaagagaat taatagagcc gtagtctgta ttaggatgtg tgtcatatgt     420
gtgttctata aactaagcat cggtgggttt agagtgttaa agtgtcagca cattccttct     480
cctttttgtct ctcaggctaa catgagagaa aatagaaaag tcttggctgt ggggattgga    540
agctcagggg gccaaatgtc cttgccagat ccttagagca ttactttgac tcctaaaaat     600
agtagtgtat gttatttgat ggcttttgtt tccatagttc catcactgac aaaactgtca    660
atactgttga tggagcagca gcatagccta gagtgatgca ttcttaccca gaggtggcaa     720
taggagaggg tccatgtaaa taggacgagg tagacagtgc atgattgtag gagaagggtt      780
gaagggagga catgattcca aaaagatcg ttctcaatgt gatggtctgac tcaaccagct     840
ggcagattac acttgccaag tcgttccctt tccttctaag tcagttggct ccatattcac      900
ttgaatatgc ctctgtttgg gcaaagcaag ataccttccac ttaacctta tccaaggaag     960
ctcttggtgt cctcttggtc ataaagttgt ctcctaccta acccagtttt accaaatgga     1020
agtaaaaggg gacaaactat ggaagatgga ctccatgcca ttgcagtcag ccaccattct    1080
```

```
cttttccata taaggagccc cattacataa gctacgggtg aggttggaac agctatgttt    1140
cataatttca agagtgtgac cacctgctc  tagtcatcat cattggatga atccagttga    1200
ctcttggca aaagggtgat acttttcact aaaaatgcct actcttcctg ttgatgttcc    1260
ttttctgttt ttacctgtc  caatttccac actagtccat ttttttattt tttagaggat    1320
cagatttag cgctggaaaa tgagttcaaa aatttcagtg taatgtcata aggatgttgg    1380
gatacagaga tttttttttt ccttggaaac aaatggactg ggaagaaaca cagcatggct    1440
ttgctctgag tttcaatctg atgattatga ccatggaaga tagtcttatg taaaggttaa    1500
atggtgttta caagtggata gataaggcgg agatggtgag aagccgggtt ttctctatgc    1560
taaatgtgtc tactaagagc agcacttcct actagctaag cacaatcata gccccacgt     1620
gatgagctgc tagtctgaat aacattccct gacttaggga aaggcacaca aaaacatata    1680
aagaatatgt ctattttcat atgtgtgata ctgacagagc catggtattc ctaaaatata    1740
ggtttctctt ttttcttgta ttcttagcaa attgcattta ttcactacat tacaaaccat    1800
cactgatgta tccaaaaatg cacacatagt tcagtatgaa aataagagaa taaaatctgt    1860
tataagcaag tgatttaggt attttctttt gtgtttatgc attatctgac tatattaaaa    1920
cctgttttc  tatttaccct ctatcagttt tctctaccaa ttatgttttt tcaatgctct    1980
ataagaatga atatggaaat tatatttctt ttttctgtaa aagagttgca actactttat    2040
tatatttaga aatccaataa acttcttatt acatttaaaa aaaaaaaaaa aaaactcgaa    2100


<210> 172
<211> 1930
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (24)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1927)
<223> n equals a,t,g, or c

<400> 172
cctttgantg tggtcccggg tgcngattgg cagcgcctcc gccgcggctc gtggttgtcc     60
cgccatggca ctgtcgcggg ggctgccccg ggagctggct gaggcggtgg ccgggggccg    120
ggtgctggtg gtggggcgg  gcggcatcgg ctgcgagctc ctcaagaatc tcgtgctcac    180
cggtttctcc cacatcgacc tgattgatct ggatactatt gatgtaagca acctcaacag    240
acagtttttg tttcaaaaga aacatgttgg aagatcaaag gcacaggttg ccaaggaaag    300
tgtactgcag ttttacccga aagctaatat cgttgcctac catgacagca tcatgaaccc    360
tgactataat gtggaatttt tccgacagtt tatactggtt atgaatgctt tagataacag    420
agctgcccga aaccatgtta atagaatgtg cctgtcagct gatgttcctc ttattgaaag    480
tggaacagct gggtatcttg gacaagtaac tactatcaaa aagggtgtga ccgagtgtta    540
tgagtgtcat cctaagccga cccagagaac ctttcctggc tgtacaattc gtaacacacc    600
ttcagaacct atacattgca tcgtttgggc aaagtacttg ttcaaccagt tgtttgggga    660
agaagatgct gatcaagaag tatctcctga cagagctgac cctgaagctg cctgggaac     720
aacgaagcc  gaagccagag ctagagcatc taatgaagat ggtgacatta aacgtatttc    780
tactaaggaa tgggctaaat caactggata tgatccagtt aaacttttta ccaagctttt    840
taaagatgac atcaggtatc tgttgacaat ggacaaacta tggcggaaaa ggaaacctcc    900
agttccgttg gatgggggctg aagtacaaag tcaaggagaa gacagaatg  catcagatca    960
acagaatgaa ccccagttag gcctgaaaga ccagcaggtt ctagatgtaa agagctatgc   1020
acgtcttttt tcaaagagca tcgagacttt gagagttcat ttagcagaaa agggggatgg   1080
```

```
agctgagctc atatgggata aggatgaccc atctgcaatg gattttgtca cctctgctgc      1140
aaacctcagg atgcatattt tcagtatgaa tatgaagagt agatttgata tcaaatcaat      1200
ggcagggaac attattcctg ctattgctac tactaatgca gtaattgctg ggttgatagt      1260
attggaagga ttgaagattt tatcaggaaa aatagaccag tgcagaacaa ttttttttgaa     1320
taaacaacca aacccaagaa agaagcttct tgtgccttgt gcactggatc ctcccaaccc      1380
caattgttat gtatgtgcca gcaagccaga ggtgactgtg cggctgaatg tccataaagt      1440
gactgttctc accttacaag acaagatagt gaaagaaaaa tttgctatgg tagcaccaga      1500
tgtccaaatt gaagatggga aaggaacaat cctaatatct tccgaagagg gagagacgga      1560
agctaataat cacaagaagt tgtcagaatt tggaattaga aatggcagcc ggcttcaagc      1620
agatgacttc ctccaggact atactttatt gatcaacatc cttcatagtg aagacctagg      1680
aaaggacgtt gaatttgaag ttgttggtga tgccccggaa aaagtggggs ccaaacaagc      1740
tgaagatgct gccaaaagca taaccaatgg gcagtgatga tgggagcttc agccctccac      1800
ctycacagct tcaaggaggc aagatggacg tytcycatag ttgatycggr tgaagaagrt      1860
tctccaataa ttgcccgacg ttcattgaag gaaggaggag gaggcccgcc aagaggggaa      1920
tttaggnttg                                                            1930


<210> 173
<211> 1509
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1494)
<223> n equals a,t,g, or c

<400> 173
ggccctggcc tctgggctga ggcttgctag ggactcgggg tggctctaag gggcagggat       60
agggctgggg agcgccgtcc tgtggccctg accagcccct tctcgtgcrg gttccacccc      120
gatgcaggtg gtcacgtgct tgacgcggga cagctacctg acgcactgct tcctccagca      180
cctcatggtc gtgctgtcct ctctggaacg cacgccctcg ccggagcctg ttgacaagga      240
cttctactcc gagtttggga acaagaccac agggaagatg gagaactacg agctgatcca      300
ctctagtcgc gtcaagttta cctaccccag tgaggaggag attggggacc tgacgttcac      360
tgtggcccaa aagatgggct agccagagaa ggccccagcc ctcagcatcc tgctgtacgt      420
gcaggccttc caggtgggca tgccaccccc tgggtgctgc aggggccccc tgcgccccaa      480
gacactcctg ctcaccagct ccgagatctt cctcctggat gaggactgtg tccactaccc      540
actgcccgag tttgccaaag agccgccgca gagagacagg taccggctgg acgatggccg      600
ccgcgtccgg gacctggacc gagtgctcat gggctaccag acctacccgc agccctcacc      660
ctcgtcttcg atgacgtgca aggtcatgac ctcatgggca gtgtcaccct ggaccacttt      720
ggggaggtgc caggtggcca ggctagagcc agccagggcc gtgaagtcca ctgaggtgtg      780
tttgtcccca gtgctgagag cagagagaag ctcatctcgc tgttggctcg ccagtgggag      840
gccctgtgtg gccgtgagct gcctgtcgag ctcaccggct agccaggccc acagccagcc      900
tgtcgtgtcc agcctgacgc ctactgggc angggcagcag gcttttgtgt tctctaaaaa      960
tgttttatcc tcccttttggt accttaattt gactgtcctc gcagagaatg tgaacatgtg     1020
tgtgtgttgt gttaattctt tctcatgttg ggagtgagaa tgccgggccc ctcagggctg     1080
tcggtgtgct gtcagcctcc cacaggtggt acagccgtgc acaccagtgt cgtgtctgct     1140
gttgtgggac cgttgttaac acgtgacact gtgggtctga ctttctcttc tacacgtcct     1200
ttcctgaagt gtcgagtcca gtcctttgtt gctgttgctg tctgtttgc tgttgctgtt     1260
ggcatcttgc tgctaatcat gaggctggta gcagaatgca cattggaagc tcccacccca     1320
tattgttctt caaagtggag gtctcccctg atccagacaa gtgggagagc ccgtgggggc     1380
aggggacctg gagctgccag caccaagcgt gattcctgct gcctgtattc tctattccaa     1440
taaagcagag tttgacaccg tcaaaaaaaa aaaaaaaaaa aaaaaaaaaa attnctgcgg     1500
cctcaaggg                                                             1509


<210> 174
<211> 3173
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```
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3119)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3121)
<223> n equals a,t,g, or c

<400> 174
tcgaccccas gcgtccgtgc tttttccacag aaggttagac cctgaaagag atggctcagc      60
accacctatg gatcttgctc ctttgcctgc aaacctggcc ggaagcagct ggaaaagact     120
cagaaatctt cacagtgaat gggattctgg gagagtcagt cactttccct gtaaatatcc     180
aagaaccacg gcaagttaaa atcattgctt ggacttctaa aacatctgtt gcttatgtaa     240
caccaggaga ctcagaaaca gcacccgtag ttactgtgac ccacagaaat tattatgaac     300
ggatacatgc cttaggtccg aactacaatc tggtcattag cgatctgagg atggaagacg     360
caggagacta caaagcagac ataaatacac aggctgatcc ctacaccacc accaagcgct     420
acaacctgca aatctatcgt cggcttggga aaccaaaaat tacacacagagt ttaatggcat     480
ctgtgaacag cacctgtaat gtcacactga catgctctgt agagaaagaa gaaaagaatg     540
tgacatacaa ttggagtccc ctgggagaag agggtaatgt ccttcaaatc ttccagactc     600
ctgaggacca agagctgact tacacgtgta cagcccagaa ccctgtcagc aacaattctg     660
actccatctc tgccccggcag ctctgtgcag acatcgcaat gggcttccgt actcaccaca     720
ccgggttgct gagcgtgctg gctatgttct ttctgcttgt tctcattctg tcttcagtgt     780
ttttgttccg tttgttcaag agaagacaag atgctgcctc aaagaaaacc atatacacat     840
atatcatggc ttcaaggaac acccagccag cagagtccag aatctatgat gaaatcctgc     900
agtccaaggt gcttccctcc aaggaagagc cagtgaacac agtttattcc gaagtgcagt     960
ttgctgataa gatgggggaaa gccagcacac aggacagtaa acctcctggg acttcaagct    1020
atgaaattgt gatctaggct gctgggctga attctccctc tggaaactga gttacaacca    1080
ccaatactgg caggttccct ggatccagat cttctctgcc caactcttac tgggagattg    1140
caaactgcca catctcagcc tgtaagcaaa gcaggaaacc ttctgctggg catagcttgt    1200
gcctaaatgg acaaatggat gcatacccctt cctgaaatga ctcccttctg aatgaatgac    1260
aaagcaggtt acctagtata gttttcccaa acttcttccc atcatagcac atgtagaaaa    1320
taatattttt atggcacact gggataaaca agcaagattg ctcacttctg gaagctgcat    1380
atgactagag gcctcttgtg actggaggta acaaccctgc ccagtaactg tgggagaagg    1440
ggatcaatat tttgcacacc tgtaataggc catggcacac cagccaagat gctctgctca    1500
cagtcagtat gtgtgaagat ccctggtgcg tggccttcac cacgcatctt gagccaaatta   1560
ggaaaatgta cccttcgctt gaggcagatg cagcccttcc cccgagtgca tggcttggag    1620
agcagaatgt gggctgcata taagcacact catccctttg tctgggaatc tttgttgcagg   1680
gcataacagg cttagtaagt ccaaacacag atgacagtgc tgtgtgggtc tctgtcagag    1740
ttgtggctct cagccatgta gacacactct ccaaatggag tgttggaaaa tgttctttct    1800
gcagggtcta gagactgctg ggacactttt cttggagtgc tacttcagaa gccttatagg    1860
atttttctttc tggccaagat ttccttctgt atcactccaa gcagcctcag cagaagaagc    1920
agccatgccc agtattccca ctctccaaaa ggaactgacc agcttatatt tctcacactt    1980
ctggggaact gggtataatc caaccatcaa aatagaagac cttgcaagaa gcagagtcat    2040
tctccagaag gaacttggga gatgatggtg cagatgatga aactgggttc atcccagttc    2100
caaagactca gagaactaga gtttaagctg aggcagagtg ccgccaccct ggcatgcccc    2160
acaaacagat caccagccag cttacacagg cattaactct cctcaatgag gaagaatcat    2220
tcacaactga gcaagacatt catatgatca tttaaggaag tgttttccctt atgtgttagc    2280
aagtataatc ggctaactcc taaatcccaa tgaatagtcc taggctggac agcaatgggc    2340
tgcaattagg cagataaaga catcagtccc agtaaagtga tccatagact catctagcac    2400
caactaccat tagcactatg ttaggagctg caaggcccca aagtagaaga tgtgcataat    2460
gtctgctctt gtgtagctca ggagacaatt ccagcacaga cactacagtt aacgctgaac    2520
tgcagctgca agtaatagca tgaacagtca gaaaaatacc ttatgagggg gcagggctga    2580
agctgggcct tgaaggatgg atgaaatttg gatagagaat gaggaagaca gagggcctcc    2640
```

```
aagtgagaga agcatgaaaa atgagcaggg gcctggatca gtggggtgta ttcagagcac    2700
ctctccagat gcaccatgca tgctcacagt ccctgccta  tgtgtggcag agtgtcccag    2760
ccagatgtgt gcccccaccc catgtccatt tacatgtcct tcaatgccca cctcaaaagg    2820
tacctcttct gtaaagcttt ccctggtatc aggaatcaaa attaatcagg gatcttttca    2880
cactgctgtt ttttcctctt tggtccttct atcactaaaa ctcatctcat tcagccttac    2940
agcataacta attatttgtt ttcctcacta cattgtacat gtgggaatta cagataaacg    3000
gaagcckgct ggggtggtgg ctcacgcctg taatcccaac actttgggag gccaaggcag    3060
gcggatcacc tgaggtcagg arttcgagat tartctggcc aacatggtga aaccccatnt    3120
ntactaaaaa tacgaaatta gccaggtgtg gtggcacaca tctgtagtcc cag          3173
```

```
<210> 175
<211> 991
<212> DNA
<213> Homo sapiens

<400> 175
aaattcggca cagctgagag gagacacaag gagcagcccg caagcaccaa gtgagaggca     60
tgaagttaca gtgtgtttcc ctttggctcc tgggtacaat actgatattg tgctcagtag    120
acaaccacgg tctcaggaga tgtctgattt ccacagacat gcaccatata gaagagagtt    180
tccaagaaat caaaagagcc atccaagcta aggacaccct cccaaatgtc actatcctgt    240
ccacattgga gactctgcag atcattaagc ccttagatgt gtgctgcgtg accaagaacc    300
tcctggcgtt ctacgtggac agggtgttca aggatcatca ggagccaaac cccaaaatct    360
tgagaaaaat cagcagcatt gccaactctt tcctctacat gcagaaaact ctgcggcaat    420
gtcaggaaca gaggcagtgt cactgcaggc aggaagccac caatgccacc agagtcatcc    480
atgcaaacta tgatcagctg gaggtccacg ctgctgccat taaatccctg ggagagctcg    540
acgtctttct agcctggatt aataagaatc atgaagtaat gtcctcagct tgatgacaag    600
gaacctgtat agtgatccag ggatgaacac cccctgtgcg gtttactgtg ggagacagcc    660
caccttgaag gggaaggaga tggggaaggc cccttgcagc tgaaagtccc actggctggc    720
ctcaggctgt cttattccgc ttgaaaatag ccaaaaagtc tactgtggta tttgtaataa    780
actctatctg ctgaaagggc ctgcaggcca tcctgggagt aaagggctgc cttcccatct    840
aatttattgt gaagtcatat agtccatgtc tgtgatgtga gccaagtgat atcctgtagt    900
acacattgta ctgagtggtt ttttctgaata aattccatat tttacctaaa aaaaaaaaa    960
aaaaactcga ggggggggcc gtacccaatt t                                    991
```

```
<210> 176
<211> 1290
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1253)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1257)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1259)
<223> n equals a,t,g, or c

<220>
<221> SITE
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<222> (1266)
<223> n equals a,t,g, or c

<400> 176
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acagccctct tcggagcctg agcccggctc tcctcactca cctcaacccc caggcggccc      60
ctccacaggg ccctctcct gcctggacgg ctctgctggt ctcccgtcc cctggagaag      120
aacaaggcca tgggtcggcc cctgctgctg cccctrctgc ycctgctgcw gccgccagca      180
tttctgcagc ctrgtggctc cacaggatct ggtccaagct acctttatgg ggtcactcaa      240
ccaaaacacc tctcagcctc catgggtggc tctgtggaaa tcccctttc cttctattac      300
ccctgggagt tagccayagy tcccracgtg agaatatcct ggagacgggg ccacttccac      360
gggcagtcct tctacagcac aaggccgcct tccattcaca aggattatgt gaaccggctc      420
tttctgaact ggacagaggg tcaggagagc ggcttcctca ggatctcaaa cctgcggaag      480
gaggaccagt ctgtgtattt ctgccgagtc gagctggaca cccggagatc agggaggcag      540
cagttgcagt ccatcaaggg gaccaaactc accatcaccc aggctgtcac aaccaccacc      600
acctggaggc ccagcagcac aaccaccata gccggcctca gggtcacaga aagcaaaggg      660
cactcagaat catggcacct aagtctggac actgccacca gggttgcatt ggctgtcgct      720
gtgctcaaaa ctgtcatttt gggactgctg tgcctcctcc tctgtggtgg aggagaagga      780
aaggtagcag ggcgccaagc agtgacttct gaccaacaga gtgtgggggag aagggatgtg      840
tattagcccc ggaggacgtg atgtgagacc cgcctgtgag tcctccacac tcgttccca      900
ttggcaagat acatggagag caccctgagg acctttaaaa ggcaaagccg caaggcagaa      960
ggaggctggg tccctgaatc accgactgga ggagagttca ctacaagagc cttcatccag     1020
gagcatccac actgcaatga tataggaatg aggtctgaac tccactgaat taaaccactg     1080
gcatttgggg gctgttyatt atagcagtgc aaagagttcc tttatcctcc ccaaggatgg     1140
aaaatacaat ttatttttgct taccatacac ccctttttctc ctcgtcccaca tttttccaatc     1200
tgtatggtgg ctgtcttcta tggcagaagg ttttgggggaa taaatagcgt ganatgntnc     1260
tgactnaaaa aaaaaaaaaa aaaaactcga                                      1290
```

<210> 177
<211> 2290
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1011)
<223> n equals a,t,g, or c

<400> 177
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tggggccct tttggatgct ctgggtgttt ttgccaagag ttacaggatg tcaagtgtgg      60
ggagctcagc acccttgctg tggaccagtg aaggctgttc cccccacaga aagcacagga aaatgcaaaa     120
atttccaggc tccaggagag aggctgggag ccccacaga aagcacagga aaatgcaaaa     180
aaaaaacagt cttttttttt tttttgcttt ttattatgaa aacaaaacaa atgccccagg     240
agaagggtcc atgattacca gaaacatcaa agagtacttt ctaccatttt tattctgttg     300
tgttgaggcc agcattgcaa taaacaagct aaactactta cattggactc attttcagta     360
actgacattt acaggaatat actagaaacg cgactaaaaa gtttaagaaa agttacggta     420
aacttgcatg cacatcatac agaaaagtaa cattttaaat ataaaaaaga aaaacttcct     480
ggaagcatta tgccagtatt aaggaacagt gctactctgg atgtgacaaa ttctgtatgt     540
gggtgttact ctttcccaaa agactgtcag aggcgtgagt gctgcaaaag aacaacaaca     600
aaaacaaaca cacaaaaaaa tgtgtcttca agtttgtaag caagatgaca ctgcccaaca     660
caaagagggg tctggagttc agttcacgcc cgaagcctgc cccctcggcc tccaggggtc     720
attcagagtg ttctcaaatc caattccgac acacgacttg tctactactcc tctcccctttg     780
aaaaaagcat gttagaagct gccctacagg tctcagcagt gggacaatct aattgaatca     840
ccgcagcctt ctaatacaga agaaacggac gtgactgtca ccctcagccc gccagcaagg     900
gcgctgagga agtcattaat ccttcgaaac tctgaaaaga aaccagtgtt gaagtctgga     960
cagaaagcct taaaaaagtg acagcaccaa tgcagctgct cagtgtaccc nccgtgggct     1020
gtcagggtca gtggcttctt tctagatgaa aggagcagag gcgagccgac gccaccgtca     1080
cagagaacca gccgagaagg aaaggcccca cgatgctccc tgtgcgctgc cccacagcc     1140
```

```
ggccgctccc ccgacggctc acacaggcag cacctcactg ccctgtggct ggaggggcat      1200
tgcaaggagc gccccccagc cccaggcacc cccggcttag ggtgtacgta tcacccagcc      1260
ctgtgctggc agcacgttac caaccagcct gcgtgaagac ctgtcaactc tcgtgtgtga      1320
attccttaaa ttcggtttaa atagtccatt aaagatctgt ttagaaaata cctttgaaaa      1380
cgagggtaac tttaaaaaat ggaaactttc aaatccattt atatttttat tataaacaaa      1440
acttaattaa aagtttaaca aactggctga aaactcacca agtgtcagac tcaccagcaa      1500
tttaaaaaat gataatttac cagcatctcc tcatcagagt tccctctcca gtaagggtat      1560
acctacatct gtaagggtca gtggactctg aatcaatttt atggttgttt taaaatcacc      1620
gtgtattagg atactaatga tagtccctat atccatccag aaatgctggc agaaagcact      1680
ggccaccata caggacagac cacaccacag ctccataccc agcgtctgcc tggaggctcc      1740
cccacgctga ggtccgggag aatgcctggt ttcagtcatt tccggactaa ctgtgacaac      1800
gcgtgagcag ggagcaccgt gcgagtctcc gggagggaat cctcctgggg cccagagact      1860
cctccacccc tggggagggc agacaggctg gggarggcct ggccaggcca ctggaggctg      1920
gcagggagca ggcatgtcca cccgcaagcc tgggaggcta actctggcat tcctggccgg      1980
agccgccatg ctcattggtg ggccagtttg ggacatcccc gtactcaaag accatatggc      2040
agcctctggg aaaacaaaac caaaacatca ccttctatta aactctgtat attattattt      2100
tttacaatag aaagttaaaa atcaagactt agatttacta tacattttt tctctcagatt      2160
acaaagttta tattatataa ctgggggttcc ctaaattgat ttcttttaaa acagtcttaa      2220
agagaccaga agtgaataca aaagaactaa acaaaataaa aaatttagaat gtgctgtagc      2280
tgaaagctgt                                                             2290
```

<210> 178
<211> 549
<212> DNA
<213> Homo sapiens

<400> 178

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ggcacgagcc atgcctggcc tctccttgat tcttacagtc actttgttgg ctgtttctga       60
ctcagcagct acctgcattg tggccaaagg atgacctatt ccttctcagg agggcaaaaa      120
tgtgtgaatag tgtctgtcca tgcctctcct catgggctac cacctctgcc accgttggtta     180
atcagtaaca accaggagag aagctgctgg aactgacctc tgggaactcc ctgggatggt      240
ttggtgcagg aatgtagtag gcatacacgt ggttgcgtgg atctcgggccc tcctgatgtg      300
agtagagagg taaaaggcca ccatctcctt gacctctggg gaactcatcc acaaagaaga      360
tgtttccaag atgcttctga agattgccta aaaatagccg gtttccaccc ccgtgaatgc      420
atccattcta gaatgctcct tcaccaggac cagagaactg atttacagaa gtgacatgaa      480
aacattccat cccagaattt gcagtagctc aaattaagtt tctagctatt aaaaagaaaa      540
aaaaaaaaa                                                              549
```

<210> 179
<211> 1509
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (517)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1509)
<223> n equals a,t,g, or c

<400> 179

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ggcacgaggg ctcattcatt ccgcgccggg cctgccagac acctgcgccc ttctgcagcc       60
gcccgccgca tccgccgccg cagcccccag catgtcgggc ccagacgtcg agacgccgtc      120
```

```
cgccatccag atctgccgga tcatgcggcc agatgatgcc aacgtggccg gcaatgtcca      180
cgggggggacc atcctgaaga tgatcgagga ggcaggcgcc atcatcagca cccggcattg      240
caacagccag aacggggagc gctgtgtggc cgccctggct cgtgtcgagc gcaccgactt      300
cctgtctccc atgtgcatcg gtgaggtggc gcatgtcagc gcggagatca cctacacctc      360
caagcactct gtggaggtgc aggtcaacgt gatgtccgaa aacatcctca caggtgccaa      420
aaagctgacc aataaggcca ccctgctggta tgtgcccctg tcgctgaaga atgtggacaa      480
ggtcctcgag gtgcctcctg ttgtgtattc ccggcangag caggaggagg agggccggaa      540
gcggtatgaa gcccagaagc tggagcgcat ggagaccaag tggaggaacg gggacatcgt      600
ccagccagtc ctcaacccag agccgaaac tgtcagctac agccagtcca gcttgatcca      660
cctggtgggg ccttcagact gcaccctgca cggctttgtg cacggaggtg tgaccatgaa      720
gctcatggat gaggtcgccg ggatcgtggc tgcacgccac tgcaagacca acatcgtcac      780
agcttccgtg gacgccatta attttcatga caagatcaga aaaggctgcg tcatcaccat      840
ctcgggacgc atgaccttca cgagcaataa gtccatggag atcgaggtgt tggtggacgc      900
cgaccctgtt gtggacagct ctcagaagcg ctaccgggcc gccagtgcct tcttcaccta      960
cgtgtcgctg agccaggaag gcaggtcgct gcctgtgccc cagctggtgc ccgagaccga     1020
ggacgagaag aagcgctttg aggaaggcaa agggcggtac ctgcagatga aggcgaagcr     1080
acagggccac gcggascytc agccctagac tccctcctcc tgccactggt gcctcgagta     1140
gccatggcaa cgggcccagt gtccagtcac ttagaagttc cccccttggc caaaaaccca     1200
attcacattg agagctggtg ttgtctgaag ttttcgtatc acagtgttaa cctgtactct     1260
ctcctgcaaa cctacacacc aaagctttat ttatatcatt ccagtatcaa tgctacacag     1320
tgttgtcccg agcgccggga ggcgttgggc agaaaccctc gggaatgctt ccgagcacgc     1380
tgtagggtat gggaagaacc cagcaccact aataaagctg ctgcttggct ggaaaaaaaa     1440
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1500
agaaaaaan                                                            1509
```

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<210> 180
<211> 1316
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (221)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (574)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1260)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1291)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1301)
<223> n equals a,t,g, or c

<220>
<221> SITE
```

```
<222> (1313)
<223> n equals a,t,g, or c

<400> 180
agctgtatca taggaaagat ggccacaccg gcggtaccag taagtgctcc tccggccacg        60
ccaaccccag tcccggcggc ggccccagcc tcagttccag cgccaacgcc agcaccggct       120
gcggctccgg ttccgctgc ggctccagcc tgcatcctca gaccctgcgg cagcagcggc       180
tgcaactgcg gctcctggcc agacccggcc ctcagcgcaa ntccagcgca gaccccagcg       240
cccgctctgc ctggtcctgc tcttccaggg ccctccccg gcggccgcgt ggtcaggctg       300
cacccagtca ttttggcctc cattgtggac agctacgaga gacgcaacga gggtgctgcc       360
cgagttatcg ggaccctgtt gggaactgtc gacaaacact cagtggaggt caccaattgc       420
ttttcagtgc cgcacaatga gtcagaagat gaagtggctg ttgacatgga atttgctaag       480
aatatgtatg aactgcataa aaaagtttct ccaaatgagc tcatcctggg ctggtacgct       540
acgggccatg acatcacaga gcactctgtg ctgnatccat gagtactaca gccgagaggc       600
ccccaacccc atccacctca ctgtggacac aagtctccag aacggccgca tgagcatcaa       660
agcctacgtc agcactttaa tgggagtccc tgggaggacc atgggagtga tgttcacgcc       720
tctgacagtg aaatacgcgt actacgacac tgaacgcatc ggagttgacc tgatcatgaa       780
gacctgcttt agcccccaaca gagtgattgg actctcaagt gacttgcagc aagtaggagg       840
ggcatcagct cgcatccagg atgccctgag tacagtgttg caatatgcag aggatgtact       900
gtctggaaag gtgtcagctg acaatactgt gggccgcttc ctgatgagcc tggttaacca       960
agtaccgaaa atagttcccg atgactttga gaccatgctc aacagcaaca tcaatgacct      1020
tttgatggtg acctacctgg ccaacctcac acagtcacag attgcactca atgaaaaact      1080
tgtaaacctg tgaatggacc ccaagcagta cacttgctgg tctaggtatt aaccccagga      1140
ctcagaagtg aaggagaaat gggtttttg tggtcttgag tcacactgag atagtcagtt      1200
gtgtgtgact ctaataaacg gagcctacct tttgtaaatt aaaaaaaaaa aaaaaaccn      1260
sgrgggggg cccggtccca ttsscccttt ngtaattcgt nttacaatcc ccnggc         1316


<210> 181
<211> 777
<212> DNA
<213> Homo sapiens

<400> 181
ggcatgwkca gacatgactt ctattgccag gctggtcaag tggcagggtc atgagggaga        60
catcgataag ggtgctcctt atgctccctg ctctggaatc caccagcggg ctatctgcgt       120
ttatggggct ggggactaga attggatgct tcaaaaccat cacctgttgg ccaacaagtt       180
tgacccaaag gtagatgata atgctcttca gtgcttagaa gaatacctac gttataaggg       240
ccattctatt gggacctgaa ctttgaagac cacamtattg aagaggcgtt gcttaccygt       300
tggggggcaa gaggcatgtt accaaacatg gyycargaam yttggykggg amcarkkkkg       360
gkkgggarrm cmrgggyttg scaawttcsk kggcmwccyt ttagggtaar rrgggckgtw       420
attagattgt gggtaaagta ggatctttg ccccttgcaaa tttgctgcct gggtgaatgy       480
tgcttgttcc ttctcmaccc ctaaccctag tagttcctcc actaacttc tcactaagtg       540
agaatgagaa ctgctgtgat agggagagtg aaggagggat atgtggtaga gcacttgatt       600
tcagttgaat gcctgctggt agcttttcca ttctgtggg ctgccgttcc taataattcc       660
aggtttggta gcgtggagga gaacttttgat ggaaagagaa ccttccctc tgtactgtta       720
acttaaaaat aaatagctcc tgattcaaag taaaaaaaaa aaaaaaaaaa aaaaaa         777


<210> 182
<211> 791
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (315)
<223> n equals a,t,g, or c
```

```
<220>
<221> SITE
<222> (340)
<223> n equals a,t,g, or c

<400> 182
ggcacagata actatgtaca tgtattcctt aaatgttttt ttaagtttta tattcttggc        60
actggtcttc aaatgtgtac atgtgtgcca gggagcaaat gccttcttgt ttctgaaatt       120
ggtctcttttag actgttcttt tttcccatct tctcacctcc tgcccctcct tcagggtact     180
tccgtggcca gaaccctcc aggtcagagg cagaagagaa gcctcatggg tcacagcagc        240
agatgtgggc tggagatcta ttcatttggt tttggcttga attttctgra tggtttactt      300
gatcytggga aaganatatc ttgccaggaa aaatgatagn ccttgacaat gttgaatgat      360
cctgcaccac cttgaaagac atttctaata tggtttgtca ggcaaagtgg ttagtagtca      420
tttgtggcct gaggtagaag tcctcagaaa tcagcagact tcactgataa aatgctgact      480
tgccctggga ctgggctctg tgagagtggc cttctgcact gtgcacagta ggtgtgaaca      540
caccacacct acagggacca cgtggtgggc tgtggactag cggccaagct ccctgcaggc      600
ccactaatag aattcagctt ttagcatggg ctgtttcata ctgttctgat gaaactgatt      660
tggtttcttt cctccatacc ccttctgcat ttcagtgttt ttgtttagtt ttcctggttt      720
ttaattataa ctacaaaata aaatctttag gctattcacc ttagcttagt aaaaaaaaaa      780
aaaaaaaact c                                                           791


<210> 183
<211> 1405
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1359)
<223> n equals a,t,g, or c

<400> 183
aaattgatta acagcttgaa agaaggctct ggttttgaag gcctagatag cagcactgcc       60
agtagcatgg agctggaaga acttcggcat gagaaagaga ttcagaacag ggaaatacag       120
aagctgatgg gccagataca tcagctcaga tccgaattac aggatatgga ggcacagcaa       180
gttaatgaag cagaatcagc aagagaacag ttacaggwtc tgcatgacca aatatgctggg      240
cagaaagcat ccaaacaaga actagagaca gaactggagc gactgaagca ggagttccac       300
tatatagaag aagatcttta tcgaacaaag aacacattgc aaagcagaat taaagatcga      360
gacgaagaaa ttcaaaaact caggaatcag cttaccaata aaactttaag caatagcagt      420
cagtctgagt tagaaaatcg actccatcag ctaacagaga tctcatcca gaaacagacc       480
atgctggaga gtctcagcac agaaaagaac tccctggtct ttcaactgga gcgcctcgaa      540
cagcagatga actccgcctc tggaagtagt agtaatgggt cttcgattca tatgtctgga      600
attgacaatg gtgaaggcac tcgtctgcga aatgttcctg ttcttttaa tgacacagaa       660
actaatctgg caggaatgta cggaaaagtt cgcaaagctg ctagttcaat tgatcagttt      720
agtattcgca tgggaatttt tctccgaaga taccccatag cgcgagtttt tgtaattata      780
tatatggctt tgcttcacct ctgggtcatg attgttctgt tgacttacac accagaaatg      840
caccacgacc aaccatatgg caaatgaacc aagcccagtt gttgcagtga ttggttgtct     900
ttttctagac ttgggatctg caagaaggcc aattgcctaa aatttctgag aacagtgcac      960
aagattattt tatcactaca agcttttaac tttttaagtt attgtacaag tattctacct     1020
aaatcttcca atttcctttta aatggtaaga gtttctaaaa cagacaataa tttaacaagc    1080
tcagctctgc tttatctgag tttagtggtc ctaatatata tgtagagaaa gatggtgggg     1140
ttgttcacct ctgtacagac catctgtatg ttaggtgaca ttgattatgg gttaattata     1200
gggaaactaa ttgtatttag tgacaaaaat aaaaagtttt ttttttataa ttcagtctgc     1260
ttttggattt tcatatattt aactttgcaa aaagatttac tttgtacatg ttacaggctt     1320
gattggtgta aatctttta taaatacata aataaaagna aaatatgcat ttttcttttc     1380
taaaaaaaaa aaaaaaaaaa ctcga                                           1405
```

```
<210> 184
<211> 1596
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1571)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1577)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1588)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1596)
<223> n equals a,t,g, or c

<400> 184
gtcatgcagt gcgccggaga actgtgctct ttgaggccga cgctaggggc ccggaaggga      60
aactgcgagg cgaaggtgac cggggaccga gcatttcaga tctgctcggt agacctggtg     120
caccaccacc atgttggctg caaggctggt gtgtctccgg acactacctt ctaggtgttt     180
ccaccagct ttcaccaagg cctccctgt tgtgaagaat tccatcacga agaatcaatg       240
gctgttaaca cctagcaggg aatatgccac caaaacaaga attgggatcc ggcgtgggag     300
aactggccaa gaactcaaag aggcagcatt ggaaccatcg atggaaaaaa tatttaaaat     360
tgatcagatg ggaagatggt ttgttgctgg aggggctgct gttggtcttg gagcattgtg     420
ctactatggc ttgggactgt ctaatgagat tggagctatt gaaaaggctg taatttggcc     480
tcagtatgtc aaggatagaa ttcattccac ctatatgtac ttagcaggga gtattggttt     540
aacagctttg tctgccatag caatcagcag aacgcctgtt ctcatgaact tcatgatgag     600
aggctcttgg gtgacaattg gtgtgacctt tgcagccatg gttggagctg gaatgctggt     660
acgatcaata ccatatgacc agagcccagc cccaaagcat cttgcttggt tgctacattc     720
tggtgtgatg ggtgcagtgg tggctcctct gacaatatta gggggtcctc ttctcatcag     780
agctgcatgg tacacagctg gcattgtggg aggcctctcc actgtggcca tgtgtgcgcc     840
cagtgaaaag tttctgaaca tgggtgcacc cctgggagtg ggcctgggtc tcgtctttgt     900
gtcctcattg ggatctatgt ttcttccacc taccaccgtg gctggtgcca ctcttactc      960
agtggcaatg tacggtggat tagttctttt cagcatgttc cttctgtatg ataccagaa     1020
agtaatcaag cgtgcagaag tatcaccaat gtatggagtt caaaaatatg atcccattaa     1080
ctcgatgctg agtatctaca tggatacatt aaatatattt atgcgagttg caactatgct     1140
ggcaactgga ggcaacagaa agaaatgaag tgactcagct tctggcttct ctgctacatc     1200
aaatatcttg tttaatgggg cagatatgca ttaaatagtt tgtacaagca gctttcgttg     1260
aagtttagaa gataagaaac atgtcatcat atttaaatgt tccggtaatg tgatgcctca     1320
ggtctgcctt tttttctgga gaataaatgc agtaatcctc tcccaaataa gcacacacat     1380
tttcaattct catgtttgag tgattttaaa atgttttggt gaatgtgaaa actaaagttt     1440
gtgtcatgag aatgtaagtc ttttttctac tttaaaattt agtaggttca ctgagtaact     1500
aaaatttagc aaacctgtgt ttgcatattt tttkggagtg cagmmtawtg taattaragc     1560
attccagtaa nagtgtnttt aaagttgntc tatatn                              1596


<210> 185
```

```
<211> 2293
<212> DNA
<213> Homo sapiens

<400> 185
gcgcagagcc cgyacgagca ggacgacgac gacaagggcg actccaagga aacgcggctg      60
accctgatgg aggaagtgct cctgctgggc ctcaaggacc gcgargytta cacatcattt     120
tggaatgact gtatatcatc tggattacgt ggctgtatgt taattgaatt agcattgaga     180
ggaaggttac aactagaggc ttgtgaatg agacgtaaaa gtctattaac aagaaaggta     240
atctgtaagt cagatgctcc aacaggggat gttcttcttg atgaagctct gaagcatgtt     300
aaggaaactc agcctccaga aacggtccag aactggattg aattacttag tggtgagaca     360
tggaatccat taaaattgca ttatcagtta agaaatgtac agctaaaaac agctaaaaac     420
ctggtggaaa agggtgtatt gacaacagag aaacagaact tcctacttt tgacatgaca     480
acacatccc tcaccaataa caacattaag cagcgcctca tcaagaaagt acaggaagcc     540
gttcttgaca aatgggtgaa tgacctcac cgcatggaca ggcgcttgct ggcctcatt     600
tacctggctc atgcctcgga cgtcctggag aatgctttg ctcctcttct ggacgagcag     660
tatgatttgg ctaccaagag agtgcggcag cttctcgact tagaccctga agtggaatgt     720
ctgaaggcca acaccaatga ggttctgtgg gcggtggtgg cggcgttcac caagtaactc     780
tgctcggggt gaaccattct cctttctctc aagtaaacca gtagtttttc ttctgttgac     840
ttctggtttt ctgtaatttg tacttccca cactataatt ggcttctgtt ttacaaaatg     900
gtgggtggct ttttctttt tgtacgtgta caggattctg tcggtacgag aggccttcct     960
ctttctgttt ttaaaaaaag ttttactgcc atattggcat tccattcct gttgccatcc    1020
tcactgttac ctgttttggg tttctggtct actttgactt tcaaagtacc tccagcctcc    1080
tcatacgcac agcttttgga tgacctcagc ttgagtttct ccatatgtgc atgtacatct    1140
agcattctgc ctacagttca gacagaagtc acaaaaggc cttcaactca ccaaaggtaa    1200
atatctgtat ctattaggac atttttaca tagacttcag ttgagatgta tacttagcaa    1260
aattatttt aaattgaaac agcacagtaa atacttaata taaaatgtcc cttggatttt    1320
gcttcccatg taaatctatt gtattattac acttgttata atttaacta taaaggtcca    1380
attgtttcac agagccagtt tgggatgggc tgcattccat ttatgctgta tatagtttga    1440
attatatata aattacccct tcttctggcc acccctgctc ccatcttagt attttgcaag    1500
atctaatcag ttgtacacct ggtgcccctc gcttgcttca atcatggtta tttgatggca    1560
aaatcgacct cttgtcgctg aaggagagag aaaagatgtg tgtctgattg gtcctgggat    1620
tttttgagct gtgccattta tggtactctt tgcctatgca tcccctttt agattttttt    1680
taaattttat cttactgttt ttataattc tattgggaag aggcttgtga ccagtaccaa    1740
tcttgagttt cttttctgt ccacaagtaa attaatatct gctctgaaat gtcatttatc    1800
tactcacaca ttcttgggga aaaaaatcaa atgtcagtcc tagcagatgt tgcatgtaaa    1860
ttggtagcaa gtaatgatta caacccagag gattaagaat tttgtaacag aaagctctat    1920
gtttaattt tttatatata attaggataa ttagcattgt cagactataa acctttgctt    1980
tttaaagttt attttttacta tttcttatc actttattgt atcatcacca ttggtttcat    2040
aatgtaaata ctatatgttg aacaaattaa atgtcaaaat ttttattac cagtccat     2100
gttaataagtg gggctttcag gtgtttagag atttttttg ttgttgttaa cattcattgc    2160
aaaagtacta gatggtgtat aactctagag ttgaattta agggattccc taatatgtat    2220
actatctttt tatctgaagt aataaataaa caatgatctt gaaagtgccy raaamaaaaa    2280
aaaaaaaaa aaa                                                        2293


<210> 186
<211> 1212
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1212)
<223> n equals a,t,g, or c

<400> 186
ggcacgaggc gagccggcgc accgtacgct gggacgtgtg gtttcagctc gtgcgcctcc      60
```

```
ccgtgggttt gcgacgttta gcgactattg cgcctcgcgcc acgccggctg cgagactggg    120
gccgtggctg ctggtcccgg gtgatgctag gcggctccct gggctccagg ctgttgcggg    180
gtgtaggtgg gagtcacgga cgttcggggg cccgaggtgt ccgcgaaggt ggcgcacatg    240
ggcggcaggg gagagcatgg ctcagcggat ggtctgggtg gacctggaga tgacaggatt    300
ggacattgag aaggaccaga ttattgagat ggcctgtctg ataactgact ctgatctcaa    360
cattttggct gaaggtccta acctgattat aaaacaacca gatgagttgc tggacagcat    420
gtcagattgg tgtaaggagc atcacgggaa gtctggcctt accaaggcag tgaaggagag    480
tacaattaca ttgcagcagg cagagtatga atttctgtcc tttgtacgac agcagactcc    540
tccagggctc tgtccacttg caggaaattc agttcatgaa gataaagagt ttcttgacaa    600
atacatgccc cagttcatga aacatcttca ttatagaata attgatgtga gcactgttaa    660
agaactgtgc agacgctggt atccagaaga atatgaattt gcaccaaaga aggctgcttc    720
tcataggggca cttgatgaca ttagtgaaag catcaaagag cttcagtttt accgaaataa    780
catcttcaag aaaaaaatag atgaaaagaa gaggaaaatt atagaaaatg gggaaaatga    840
gaagaccgtg agttgatgcc agttatcatg ctgccactac atcgttatct ggaggcaact    900
tctggtggtt tttttttctc acgctgatgg cttgaccagag caccttcggt taacttgcat    960
ctccagattg attactcaag cagacagcac acgaaatact atttttctcc taatatgctg   1020
tttccattat gacacagcag ctccttttgta agtaccaggt catgtccatc ccttggtaca   1080
tatatgcatt tgctttttaaa ccatttcttt tgtttaaata aataaataag taaataaagc   1140
tagttctatt gaaatgcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1200
aaaaaaaaaa an                                                        1212


<210> 187
<211> 1605
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1363)
<223> n equals a,t,g, or c

<400> 187
gcttccggaa gttgcttttg tccaaacatc cgggcttctc cttttgtgt tccggccgat     60
cccacctctc ctcgacctg gacgtctacc ttccggaggc ccacatcttg cccactccgc    120
gcgcggggct agcgcgggtt tcagcgacgg gagccctcaa ggcgacatggc aactacagcg    180
gcgcggcgg gcggcgcccg aaatgggagc ggcccggaat ggggagggtt cgaagaaaac    240
atccagggcg gaggctcagc tgtgattgac atggagaaca tggatgatac ctcaggctct    300
agcttcgagg atatgggtga gctgcatcag cgcctgcgcg aggaagaagt agacgctgat    360
gcagctgatg cagctgctgc tgaagaggag gatggagagt tcctgggcat gaagggcttt    420
aagggacagc tgagccggca ggtggcagat cagatgtggc aggctgggaa aagacaagcc    480
tccagggcct tcagcttgta cgccaacatc gacatcctca gaccctactt tgatgtggag    540
cctgctcagg tgcgaacagg gctcctggaa tccatgatcc ctatcaagat ggtcaacttc    600
cccagaaaa ttgcaggtga actctatgga cctctcatgc tggtcttcac tctggttgct    660
atcctactcc atgggatgaa gacgtctgac actattatcc gggagggcac cctgatgggc    720
acagccattg gcacctgctt cggctactgg ctgggagtct catccttcat ttacttcctt    780
gcctacctgt gcaacgccca gatcaccatg ctgcacatgt tggcactgct gggctatggc    840
ctctttgggc attgcattgt cctgttcatc acctataata tccacctcca cgccctcttc    900
tacctcttct ggctgttggt gggtggactg tccacactgc gcatcggtag agtgttggtg    960
tctcggaccg tgggccccac acagcggctg ctctctctgtg gcaccctggc tgccctacac   1020
atgctcttcc tgctctatct gcattttgcc taccacaaag tggtagaggg gatcctggac   1080
acactggagg gccccaacat cccgcccatc cagagggcat ccctgccatg tctccctgctg   1140
ctcccctgctg ctcggcttcc caccaccgtc ctcaacgcca cagccaaagc tgttgcggtg   1200
accctgcagt cacactgacc ccacctgaaa ttcttggcca gtcctctttc ccgcagccct   1260
agagaggagg aagactatta aaggacagtc ctgatgacat gtttcgtaga tgggtgtttgc   1320
agctgccact gagctgtagc tgcgtaagta cctccttgat gcntgtcggc acttctgaaa   1380
ggcacaaggc caagaactcc tggccaggac tgcaaggctc tgcagccaat gcagaaaatg   1440
ggtcagctcc tttgagaacc cctccccacc tacccccttcc ttcctcttta tctctcccac   1500
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attgtcttgc taaatataga cttggtaatt aaaatgttga ttgaagtctg gaaaaaaaa      1560
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaac tcgag                      1605



<210> 188
<211> 1516
<212> DNA
<213> Homo sapiens

<400> 188
attcggcatg aggggtcac gtggtggctg ggccggggaa atggcggctt caggagagag        60
cgggacttca ggcggcggag gcagcaccga ggaagcattt atgaccttct acagtgaggt       120
gaaacaaata gagaagagag actcggttct aacttcgaaa aatcagattg aaagactgac       180
ccgtcctggt tcctcttact tcaatttgaa cccatttgag gttcttcaga tagatcctga       240
agttacagat gaagaaataa aaaagaggtt tcggcagtta tccatcttgg tgcatcctga       300
caaaaatcaa gatgatgctg acagagcaca aaaggctttt gaagctgtgg acaaagctta       360
caagttgcta ctggatcagg agcaaaagaa gagggccctg gatgtaattc aggcaggaaa       420
agaatacgtg gacacactg tgaaagagcg aaaaaaacaa ttaaagaagg aaggaaaacc       480
tacaattgta gaggaggatg atcctgagct gttcaaacaa gctgtatata aacagacaat       540
gaaactcttt gcagagctgg aaattaaaag gaaagagaga gaagccaaag agatgcatga       600
aaggaaacga caaagggaag aagagattga agctcaagaa aaagccaaac gggaaagaga       660
gtggcagaaa aactttgagg aaagtcgaga tggtcgtgtg gacagctggc gaaacttcca       720
agccaatacg aagggaaga aagagaagaa aaatcggacc ttcctgagac caccgaaagt       780
aaaaatggag caacgtgagt gaccgcccaa ggtcacaggc acagaacctt tccccctgcta      840
tctccttcc tgcttcgaag gactcattct ttcctcccac ttccaccca acatagagta       900
gtatttgctt tttagtccat tttgtttca atacgattta atatcgatca gagtaattct       960
tttgtacatt gaaatgaggg gcttggttta aaaaagacc tttccctctc cctgcccta      1020
gaacaaccag tattagaagg tgccaccatt ggtgctgcct tctcttccca cagcctgtaa      1080
ctcagtgttt tgtacttcac tgaattgtga tggttagaaa cttcgtggat agtttgtgga      1140
aatcatccaa ttaaacatac tgcttaaaac agtgttgctg tgacttcaga gacaagcctg      1200
gaaggggcac cttaggaagc ccccttcgctt cagttgctcg cttctggggtg tgctcccttc      1260
gaaggcccag ataagacagg gaacacttgt gagcacacag agcagcatct gatgccctgt      1320
ggtgtttggc atgtgcccc tgtctactga ccaatcagtg tggcatgagg cccacgccac      1380
ccaaaccttt cactttccaa agagctagcc gtcctccacc cagtaccatg tcctagcctg      1440
tctgcatttg ttagtggtaa tattctttat gtataataaa tttttatacc caaaaaaaaa      1500
aaaaaaaaaa actcga                                                     1516



<210> 189
<211> 681
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (152)
<223> n equals a,t,g, or c

<400> 189
gctcccatgt tgctggctgt ccgtacatca ccctgtcccc tgcaggaggg ggctacaggc        60
catctccctc ctgtaggcct ctgactcccc tccacttttg ggccctcagc ttatctgggg       120
caggggacca ttgcagcacc ctccccctcct cnggactcaa ggtgctgagg tataagccct       180
gggccccaga tccctgrtka caccttcctg gagaagactc tcaaaagtga ctgtatattt       240
gagttcacca gcaataactc cccacactcg aagcaggtcc aagcccmagg atcccagggt       300
ccttgggctc tgtggcactg tcttcccaag atccttcctg ttgcacaatg ggaaacctaa       360
gaggaaaaag acaggggcct gcttgcccag ccatgcgagg gattccatgc ccacctgccc       420
tctgyctgcc tcgctggaat gtgggccct gctccccgtc aggttgtgct gtctctgacc       480
tatgtttaca tccccgaggg gtttctgcct cctccccacc caggtcaggg tgtggtccag       540
```

```
cagcttgctg tggggtgctg acatgtgtca ccactgcccc ccttgccccc ggggggggtca      600
tggtctcctc ctggatgctg ctccttgaat ytttttttytt gawaaaccyt ttamaattaa      660
aaaaaaaaaa aaaaaactcg a                                                  681
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<210> 190
<211> 1014
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1005)
<223> n equals a,t,g, or c

<400> 190
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gcctcaagcc acgcatatga taatttttctg gaacattcaa attcagtgtt tctacagcca      60
gttagtctac aaaccattgc agcagcacca tcaaaccaga gtctgccact ttttgtcatc      120
gctgatgat tgctggca aggtggcctt ttagagctct taaaagccca caaaaaggct       180
attcgtagag ccacagtcaa cacatttggt tatattgcaa aggccattgg cctcatgatg      240
tattggctac acttctgaac aacctcaaag ttcaagaaag gcagaacaga gtttgtacca      300
ctgtagcaat agctattgtt gcagaaacat gttcacccctt tacagtactc cctgccttaa      360
tgaatgaata cagagttcct gaactgaatg ttcaaaatgg agtgttaaaa tcgctttcct      420
tcttgtttga atatattggt gaaatgggaa aagactacat ttatgccgta acaccgttac      480
ttgaagatgc tttaatggat agagaccttg tacacagaca gacggctagt gcagtggtac      540
agcacatgtc acttggggtt tatggatttg gttgtgaaga ttcgctgaat cacttgttga      600
actatgtatg gcccaatgtr tttgagacat ctcctcatgt aattcaggca gttatgggag      660
ccctagaggg cctgagagtt gctattggac catgtagaat gttgcaatat tgtttacagg      720
gtctgtttca cccagcccgg aaagtcagag atgtatattg gaaaatttac aactccatct      780
acattggttc ccaggacgct ctcatagcac attacccaag aatctaccaa cgatgataag      840
racacctata ttcgttatga acttgactat atcttataat tttattgttw atttkgtgkt      900
taatgcacas tacttcacac cttaaacttg ctttgatttg gtgatgtaaa cttttaaaca      960
ttgcagatca gtgtaggact ggtccatagg ggaagagcta ggaantccat aggc           1014
```

<210> 191
<211> 2779
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (318)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2003)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2004)
<223> n equals a,t,g, or c

<400> 191
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tcgcagcagg gtgtgtccag atggtcagtc tctggtggct agcctgtcct gacaggggag      60
agttaagctc ccgytctcca ccgtgccggc tggccaggtg ggctgagggt gaccgagaga      120
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ccagaacctg cttgctggag cttagtgctc agagctgggg agggaggttc cgccgctcct     180
ctgctgtcag cgccggcagc ccctccggc ttcacttcct cccgcagccc ctgctactga       240
gaagctccgg gatcccagca gatcccacgc cctggcctca gcctgcgggg cttcagtcag       300
gccaacaccg acgcgcantg ggaggaagac aggaccttg acatctccat ctgcacagag        360
gtcctggctg gaccgagcag cctcctcctc ctaggatgac ctcaccctcc agctctccag       420
ttttcaggtt ggagacatta gatggaggcc aagaagatg ctctgaggcg gacagaggaa        480
agctggattt tgggagcggg ctgcctccca tggagtcaca gttccagggc gaggaccgga       540
aattcgcccc tcagataaga gtcaacctca actaccgaaa gggaacaggt gccagtcagc       600
cggatccaaa ccgatttgac cgagatcggc tcttcaatgc ggtctcccgg ggtgtcccg        660
aggatctggc tggacttcca gagtacctga gcaagaccag caagtacctc accgactcgg       720
aatacacaga gggctccaca ggtaagacgt gcctgatgaa ggctgtgctg aacccttaagg      780
acggggtcaa tgcctgcatt ctgccactgc tgcagatcga ccgggactct ggcaatcctc       840
agcccctggt aaatgcccag tgcacagatg actattaccg aggccacagc gctctgcaca       900
tcgccattga gaagaggagw ctgcagtgtg tgaagctcct ggtggagaat ggggccaatg       960
tgcatgcccg ggtctgcggc gcttcttcca gaagggccaa gggacttgct tttatttcgg      1020
tgagctaccc ctctctttgg ccgcttgcac caagcagtgg gatgtggtaa gctacctcct      1080
ggagaaccca caccagcccg ccagcctgca ggcactgact cccagggcaa cacagtcctg      1140
catgccctag tgatgatctc ggacaactca gctgagaaca ttgcactggt gaccagcatg      1200
tatgatgggc tcctccaagc tggggccgc ctctgcccta ccgtgcagct tgaggacatc       1260
cgcaacctgc aggatctcac gcctctgaag ctggccgcca aggagggcaa gatcgagatt      1320
ttcaggcaca tcctgcacgg ggagttttca ggactgagcc accttcccg aaagttcacc       1380
gagtggtgct atgggcctgt ccgggtgtcg ctgtatgacc tggcttctgt ggacagctgt      1440
gaggagaact tgcctgccag gatcattgcc tttcattgca agagccgca ccgacaccga       1500
atggtcgttt tggagcccct gaacaaactg ctgcaggcga aatgggatct gctcatcccc      1560
aagttcttct taaacttcct gtgtaatctg atctacatgt tcatcttcac cgctgttgcc      1620
taccatcagc ctacctgaa gaagcaggcc gcccctcacc tgaaagcgga ggttggaaac       1680
tccatgctgc tgacgggcca catcctcatc ctgctagggg gatgctacct cctcgtgggc      1740
cagctgtggt acttctggcg gcgccacgtg ttcatctgga tctcgttcat agacagctac      1800
tttgaaatcc tcttcctgtt ccargccctg ctcacagtgg tgtcccargt gctgtgtttc      1860
ctggscatcg agtggtacct gcccctgctt gtgtctgcgc tggtgctggg ctggctgaac      1920
ctgctttact atacacgtgg cttccagcac acaggcatct acagtgtcat gatccagaag     1980
ccctggtgag cctgagccag gannttggcg ccccgaagct cctacaggcc ccaatgccac      2040
agagtcagtg cagcccatgg agggacagga kgacgakggc aacggggccc agtacagggg     2100
tatcctggaa gcctccttga agctcttcaa attcaccatc ggcatgggag agctggcctt     2160
ccaggarcag ctgcacttcc gcggcatggt gctgctgctg ctgctggsct acgtgctgct     2220
cacctacatc ctgctgctca acatgctcat cgccctcatg agcgagaccg tcaacagtgt    2280
cgccactgac agctggagca tctggaagct gcagaaagcc atctctgtcc tggagatgga    2340
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taagccagat ggcagccsg atgagcgctg gtgcttcagg gtggaggagg tgaactgggc     2460
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aactctcgag agcctgctcc tggcttcccc tcccaaggag gatgaggatg gtgcctgcaa    2580
ggaaaactat gtgcccgtcc agctcctcca gtccaactga tggcccagat gcagcaggag    2640
gccagaggac agagcaggag atctttccaa ccacatctgc tggctctggg gtcccagtga    2700
attctggtgg caaatatata ttttcactaa ctcaaaaaa aaaaaaaaa aaaaaaaaa        2760
aaaaaaaaaa aaaaaaggc                                                  2779
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acccgctccg ctccgctccg ctcggccccg cgccgcccgt caacatgatc cgctgcggcc      60
tggcctgcga gcgctgccgc tggatcctgc ccctgctcct actcagcgcc atcgccttcg     120
acatcatcgc gctggccggc cgcggctggt tgcagtctag cgaccacggc cagacgtcct     180
cgctgtggtg gaaatgctcc caagagggcg gcggcagcgg gtcctacgag gagggctgtc     240
agagcctcat ggagtacgcg tggggtagag cagcggctgc catgctcttc tgtggcttca     300
tcatcctggt gatctgtttc atcctctcct tcttcgccct ctgtggaccc cagatgcttg     360
tcttcctgag agtgattgga ggtctccttg ccttggctgc tgtgttccag atcatctcc      420
tggtaattta ccccgtgaag tacacccaga ccttcaccct tcatgccaac cstgctgtca     480
cttacatcta taactgggcc tacggctttg ggtgggcagc cacgattatc ctgatygget     540
gtgccttctt cttctgctgc ctccccaact acgaagatga ccttctgggc aatgccaagc     600
ccaggtactt ctacacatct gcctaacttg ggaatgaatg tgggagaaaa tcgctgctgc     660
tgagatggac tccagaagaa gaaactgttt ctccaggcga ctttgaaccc attttttggc     720
agtgttcata ttattaaact agtcaaaaat gctaaaataa tttgggagaa aatatttttt     780
aagtagtgtt atagtttcat gtttatcttt tattatgttt tgtgaagttg tgtcttttca     840
ctaattacct atactatgcc aatatttcct tatatctatc cataacattt atactacatt     900
tgtaagagaa tatgcacgtg aaacttaaca ctttataagg taaaaatgag gtttccaaga     960
tttaataatc tgatcaagtt cttgttattt ccaaatagaa tggactcggt ctgttaaggg    1020
ctaaggagaa gaggaagata aggttaaaag ttgttaatga ccaaacattc taaaagaaat    1080
gcaaaaaaaa agtttatttt caagccttcg aactatttaa ggaaagcaaa atcatttcct    1140
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gcttcatgtt gactcgatat gtcatctagg aaagtactat ttcatggtcc aaacctgttg    1260
ccatagttgg taaggctttc ctttaagtgt gaaatattta gatgaaagtt tctctttaa     1320
agttctttat aggggttaggg tgtgggaaaa tgctatatta ataaatctgt agtgtttttgt   1380
gtttatatgt tcagaaccag agtagactgg attgaaagat ggactgggtc taatttatca    1440
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aagtgccact aaaacagcct caggagaata aatgacttgc ttttctaaat ctcaggttta    1560
tctgggctct atcatatagga caggcttctg atagtttgca actgtaagca gaaacctaca   1620
tatagttaaa atcctggtct ttcttggtaa acagattta aatgtctgat ataaaacatg     1680
ccacaggaga attcggggat ttgagtttct ctgaatagca tatatatgat gcatcggata    1740
ggtcattatg attttttacc attttgactt acataatgaa aaccaattca ttttaaatat    1800
cagattatta ttttgtaagt tgtcggaaaaa gctaattgta gttttcatta tgaagtttt    1860
ccaataaacc aggtattcta aaaaaaaaaa aaaaaactn gagggggggc ccggtaccca    1920
att                                                                  1923


<210> 193
<211> 2346
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (220)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (515)
<223> n equals a,t,g, or c

<400> 193
aggctcaggg ggacactctc aaaattacac agcttttaac aggtggcaga attggggttc      60
agacccagat ctgggttcaa gtcactcatg gtgtgattgc ggcattcctt cccgcatctg     120
ggccttgcca tctctctctc cgagtggaca tggagaggac gggggcccag cagctggatg     180
gctgcagggg atcaagtctt ctctgtgggct gggcacgtan aagagcatgt ggctggtgga    240
cggcatgcct ggctcctcac ctggcagtct gcctgccctg ctaaccggct gtctcttgtt    300
ccccctagtgc cctcggctag catgacccgc ctgatgcgwt sccgcacagc ctctggttcc   360
agcgtcattc tctggatggc acccgcagcc gctcccacac cagcgagggc acccgaagcc    420
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gctcccacac cagcgagggc acccgcagcc gctcgcacac cagcgagggg gcccacctgg      480
acatcacccc caactcgggt gctgctggga acagngccgg gcccaagtcc atggaggtct      540
cctgctaggc ggctgcccca gctgccgccc ccggactctg atctctgtag tggccccctc      600
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agcttatttt gtaagagtga gctctggtgg agacaaatga ggtctattac gtgggtgccc      720
tctccaaagg cggggtggcg gtggaccaaa ggaaggaagc aagcatctcc gcatcgcatc      780
ctcttccatt aaccagtggc cggttgccac tctcctcccc tccctcagag acaccaaact      840
gccaaaaaca agacgcgtac agcacacact tcacaaagcc aagcctaggc cgccctgagc      900
atcctggttc aaacgggtgc ctggtcagaa ggcagccgc ccacttcccg tttcctcttt      960
aactgaggag aagctgatcc agtttccgga aacaaaatcc ttttctcatt tggggagggg     1020
ggtaatagtg acatgcaggc acctctttta aacaggcaaa acaggaaggg ggaaaaggtg     1080
ggattcatgt cgaggctaga ggcatttgga acaacaaatc tacgtagtta acttgaagaa     1140
accgattttt aaagttggtg catctagaaa gctttgaatg cagaagcaaa caagcttgat     1200
ttttctagca tcctcttaat gtgcagcaaa agcaggcrac aaaatctcct ggctttacag     1260
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tgcctctcct ccacagcccc aacctcccac ccctgataca tgagccagtg attattcttg     1380
ttcaggagga agatcattta gatttgtttt gcattcctta gaatggaggg caacattcca     1440
cagctgccct ggctgtgatg agtgtccttg caggggccgg agtaggagca ctggggtggg     1500
ggcggaattg gggttactcg atgtaaggga ttccttgttg ttgtgttgag atccagtgca     1560
gttgtgdattt ctgtggatcc cagcttggtt ccaggaattt tgtgtgattg gcttaaatcc     1620
agttttcaat cttcgacagc tgggctggaa cgtgaactca gtagctgaac ctgtctgacc     1680
cggtcacgtt cttggatcct cagaactctt tgctcttgtc ggggtggggg tgggaactca     1740
cgtggggagc ggtggctgag aaaatgtaag gattctggaa tacatattcc atgggacttt     1800
ccttccctct cctgcttcct cttttcctgc tccctaacct ttcgccgaat ggggcagcac     1860
cactgacgtt tctgggcggc cagtgcggct gccaggttcc tgtactactg cctttgtactt     1920
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gtaagtcagc cactgggacc cgaggatttc tgggaccccg cagttgggag gaggaagtag     2040
tccagccttc caggtggcgt gagaggcaat gactcgttac ctgccgcccca tcaccttgga     2100
ggccttccct ggccttgagt agaaaagtcg gggatcgggg caagagaggc tgagtacgga     2160
tgggaaacta ttgtgcacaa gtctttccag aggagtttct taatgagata tttgtattta     2220
tttccagacc aataaatttg taacttttgca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     2280
aaaaaaaaaa aaaaaaaact cgaggggggc ccgtacccaa ttcgccgtat atgatcgtaa     2340
acaatc                                                               2346
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<210> 194
<211> 3054
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1968)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2645)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3034)

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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3047)
<223> n equals a,t,g, or c

<400> 194
tatctgaacc accctttatt ctacatatga taggcagcac tgaaatatcc taacccccta        60
agctcmaggt gccctgtggn acgagcaact ggactatagc agggctgggc tctgtcttcc       120
tggtcatagg ctcactcttt cccccaaatc ttcctctgga gctttgcagc caaggtgcta       180
aaaggaatag gtaggagacc tcttctatct aatccttaaa agcataatgt tgaacattca       240
ttcaacagct gatgccctat aacccctgcc tggatttctt cctattaggc tataagaagt       300
agcaagatct ttacataatt cagagtggtt tcaatgcctt cctaccctct ctaatggccc       360
ctccatttat ttgactaaag catcacacag tggcactagc attataccaa gagtatgaga       420
aatacagtgc tttatggctc taacattact gccttcagta tcaaggctgc ctggagaaag       480
gatggcagcc tcagggcttc cttatgtcct ccaccacaag agctccttga tgaagtcat       540
cttttttccc tatcctgttc ttccctcccc cgctcctaat ggtacgtggg tacccaggct       600
ggtcttgggg ctaggtagtg gggaccaagt tcattacctc cctatcagtt ctagcatagt       660
aaaactacggt accagtgtta gtgggaagag ctgggtttc ctagtatacc cactgcatcc       720
tactctacc tggtcaaccc gctgcttcca ggtatgggac ctgctaagtg tggaattacc       780
tgataaggga gagggaaata caaggagggc ctctggtgtt cctggcctca gccagctgcc       840
cacaagccat aaaccaataa aacaagaata ctgagtcagt ttttatctg ggttctcttc       900
attcccactg cacttggtgc tgctttggct gactgggaac accccataac tacagagtct      960
gacaggaaga ctggagactg tccacttcta gctcggaact tactgtgtaa ataaactttc     1020
agaactgcta ccatgaagtg aaaatgccac attttgcttt ataatttcta cccatgttgg     1080
gaaaaactgg cttttttccca gccctttcca gggcataaaa ctcaacccct tcgatagcaa     1140
gtcccatcag cctattattt ttttaaagaa aacttgcact tgttttttctt tttacagtta     1200
cttccttcct gccccaaaat tataaactct aagtgtaaaa aaaagtctta acaacagctt     1260
cttgcttgta aaaatatgta ttatacatct gtattttaa attctgctcc tgaaaaatga     1320
ctgtcccatt ctccactcac tgcatttggg gcctttccca ttggtctgaa tgtctttat     1380
cattgcaggc cagtggacag agggagaagg gagaacaggg gtcgccaaca cttgtgttgc     1440
tttctgactg atcctgaaca agaaagagta acactgaggc gctcgctccc atgcacaact     1500
ctccaaaaca cttatcctcc tgcaagagtg ggcttccag ggtcttttact gggaagcagt     1560
taagcccccct cctcaccccct tccttttttc tttctttact ccttttggctt caaaggattt     1620
tggaaaagaa acaatatgct ttacactcat tttcaatttc taaatttgca ggggatactg     1680
aaaaatacgg caggtggcct aaggctgctg taaagttgag gggagaggaa atcttaagat     1740
tacaagataa aaaacgaatc ccctaaacaa aaagaacaat agaactggtc ttccatttg     1800
ccacctttcc tgttcatgac agctactaac ctggagacag taacatttca ttaaccaaag     1860
aaagtgggtc acctgacctc tgaagagctg agtactcagg ccactccaat caccctacaa     1920
gatgccaagg aggtcccagg aagtccagct ccttaaactg acgctagnca ataaacctgg     1980
gcaagtgagg caagagaaat gaggaagaat ccatctgtga ggtgacagc aaggatgaaa     2040
gacaaagaag gaaaagagta tcaaaggcag aaaggagatc atttagttgg gtctgaaagg     2100
aaaagtcttt gctatccgac atgtactgct agtacctgta agcattttag gtcccagaat     2160
ggaaaaaaaa atcagctatt ggtaatataa taatgtcctt tccctggagt cagttttttt     2220
aaaaagttaa ctcttagttt ttacttgttt aattctaaaa gagaagggag ctgaggccat     2280
tccctgtagg agtaaagata aaaggatagg aaaagattca aagctctaat agagtcacag     2340
ctttcccagg tataaaacct aaaattaaga agtacaataa gcagaggtgg aaaatgatct     2400
agttcctgat agctacccac agagcaagtg atttataaat ttgaaatcca aactactttc     2460
ttaatatcac tttggtctct attttttccca ggacaggaaa tatgtccccc cctaacttc     2520
ttgcttcaaa aattaaaatc cagcatccca agatcattct acaagtaatt ttgcacagac     2580
atctcctcac cccagtgcct gtctggagct caccaaagat caccaaacaa cttggttgtg     2640
aaccnaactg cctaacttt ctgggggagg gggatagct agactaggag accagaagtg     2700
aatgggaaag ggtgaggact tcacaatgtt ggcctgtcag agctgatta gaagccaaga     2760
cagtggcagc aaaggaagac ttggcccagg aaaaacctgt gggttgtgct aatttctgtc     2820
cagaaaatag ggtggacaga agcttgtggg gtgcatggag gaattgggac ctggttatgt     2880
tgttattctc ggactgtgaa ttttggtgat gtaaaacaga atattctgta aacctaatgt     2940
ctgtataaat aatgagcgtt aacacagtaa aatattcaat aagaagtcaa aaaaaaaaa     3000
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```
aaaaaactcg aggggggggcc cggtacccaa tttnccaaat agagatngta ttac          3054


    <210> 195
    <211> 907
    <212> DNA
    <213> Homo sapiens

    <220>
    <221> SITE
    <222> (18)
    <223> n equals a,t,g, or c

    <220>
    <221> SITE
    <222> (89)
    <223> n equals a,t,g, or c

    <400> 195
    ggcagagctc gtggccgnaa cttttctgc tcctggctgc cacctactgg ctggccgcgg     60
    ctctggcctg ggcctgcacc agcctgcgng cgggctccca cagcagcccc cttccaagca    120
    gcgtccccac accgcgcacc ttctgcggga acgtgctcgc cgtgccgggg accatatgga    180
    cggaaggctt tgtgctcacc tacaagctgg gtgagcaggg tgccagcagc ctgttgatcc    240
    tcttggctcc tgctggagca cgagcggcgt ttctgctccc gagttgggac tgtggaatgg    300
    tgtgggtgct gtggtctgct ccatcgctgg ctcctccctg ggtgggacct tgctggccaa    360
    gcactggaaa ctgctgcctc tgtgaggtcg gtgctgcgct tccgcctcgg gggcctagcc    420
    tgtcagactg ccttggtctt ccaccttgga cacctgggg gccagcatgg acgctggcac     480
    aatcttgaga gggtcagcct tgctgagcct atgtctgcag cacttcttgg gargcctggt    540
    caccacagtc accttcactg ggaatgatgc gctgcagcca gctggccccc agggccttgc    600
    aggccacaca ctacagcctt ctggccacgc tggagctgct gggaagctg ctgctgggca    660
    ctytggccgg agggcctggc tgatgggttg gggccacatc cctgcttctt gctcctgctc    720
    atcctctctg cctttcccgt tctgtacctg gacctagcac ccagcacctt tctctgagct    780
    gagtggctgg agtggtcaat aaagccacat gtgcctgtgg cccaaaaaaa aaaaaaaaaa    840
    aaaaaaaaaa aaaaaaactg gaggggggc ccggtaccca aatcgccgga tatgatcgta    900
    aacaatc                                                             907


    <210> 196
    <211> 1290
    <212> DNA
    <213> Homo sapiens

    <220>
    <221> SITE
    <222> (871)
    <223> n equals a,t,g, or c

    <220>
    <221> SITE
    <222> (964)
    <223> n equals a,t,g, or c

    <220>
    <221> SITE
    <222> (1169)
    <223> n equals a,t,g, or c

    <220>
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<221> SITE
<222> (1172)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1182)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1189)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1226)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1243)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1259)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1267)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1286)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1290)
<223> n equals a,t,g, or c

<400> 196
ggcacgagga gggacaggga gtgggcaagg ggaagaagca gcttatttga ctaaccagcc     60
cctctgtggt ccaccagcgt cttggcttgg tgggagggct ctcaatcagc agggcccag    120
kagggcaaga agaagtgggg caaagcctgg cgctcggccg cggtcgcggc agctttgcma    180
tctggagcca cgcctcctcc aggccatgct ccttgaactt ggaaatgtca accggagccc    240
ttaacaccag ccctccagca tctaatagac ttgaatctac tctaaacgaa tatttaatcc    300
aacctcaact acattgtagc tcagtccaac gactaaccct gaaatggggg tgttccagcc    360
ttcagcgaga tggccaagcg gtcccctggg ggctgtggca gcgggcttat ccttctctgt    420
tgccaacctt gccgtccgac ctcctccgcc cccatgcggt gaccccgtcc gtgtctgtgt    480
ctgtccatac gtgtgagtcc agctaaaaag acaaaacaga acccgtgggc ccagctcgga    540
aggtgcgtgg agaaggctcc gacgtctccg aagtgcagcc cttgggatgg cattccgttg    600
tgtgccttat tcctggagaa tctgtatacg gctcgcctat aagaaatata gcctcttcat    660
gctgtattaa aaggactttt aaaagcaaaa aaaaaaaaaa aaaaactcga gggggggccc    720
ggtacccaat tcgcccaata gtgagtcgta ttacaattca ctgggccgtc sttttaacaa    780
```

```
cgtcgtgaac tgggaaaacc ctggcgttta cccaacttaa tcgccttgca gcacatcccc      840
ctttcgccag ctggcgttaa tagcgaaaaa ngcccgcacc cgaatcgccc ttcccaacag      900
tttgcgcagc cctgaatggc gaaatggcaa attgtaagcg tttaatattt tkkttaaaat      960
tccncgttwa awttttttgtt taaatcarct caatttttttt aacccaataa gsccgaaatc     1020
cggcaaatcc ccyttattaa ttccaaaaaa ataaaccsaa aawggggtttg aattttttkt     1080
ttccccaytt ttggaaacaa awtyccccct ttttaaaaaa gttggaaccc ccamccytcc      1140
aaaggggaaa aaacsytttt ytgggggggna anggggcccc cntactttna acaycccccc     1200
ccaawcaatt tttttgggg gtcccnaaag gtcccctaa aancttttttt cggaacccna      1260
aggggancccc cccatttaaa attttnggtn                                      1290
```


<210> 197
<211> 582
<212> DNA
<213> Homo sapiens

<400> 197
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ggcacgaggt aatttctacc agaaatttcc agagcattat gtaggtagaa aaaaatgcaa        60
gcaagctgtt aaagatcttg gatcccatta tatagtatgt atagctgaaa tctgtaattc       120
aatcacttttt tctcttttttat cctctaacca aaaaattgtt taatttttgca tcccaaatgt   180
ttttaatctt tgtatatttt ttaaaaatcc ttttctcctc atcattgcct tttttgtggt       240
tgtaaatagaa cttacttgca ctttgaagat gagttactcc ttgtcatctt acaaatatgt      300
gatatggtaa ttttcataac agatgtcagt tttgaaccaa gaattggtga tttgtttata      360
agaaaaaaac tggcttcatt tctgtgaaat tgctctttga aaatttcttt ttacacgtgt      420
aagccaactg agataccgtg atggtgttga tttcttttcaa tgatgcttac catctatttt     480
agccactgag cctttttatta tttgtctatt tgtaaagttt atttgtctta actcatttaa     540
taaatatact gtttatctgt ttctgaaaaa aaaaaaaaaa aa                         582
```


<210> 198
<211> 1020
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (86)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (87)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (107)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (978)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (990)
<223> n equals a,t,g, or c

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<220>
<221> SITE
<222> (995)
<223> n equals a,t,g, or c

<400> 198
 ggtgtgcctg gatggtcgtg taggtgagtt ttaccaagga ttatggtaac aaatgagtga      60
 gacctctatg gagaaaatat tgaagnncat taaagaagac ctcatantag gagagaatgt     120
 sctttggagg atttgtattg agcttttaca gtattcattt ttcaactcaa ggcaatggct     180
 ttctacacca actctcaatcc ataaacgggt cttatgacat ctatgaagta gtagcaagac    240
 atgcttagtg tgtatttctc tctttgagac actgtaattt ctaccagaaa tttccagagc     300
 attatgtagg tagaaaaaaa tgcaagcaag ctgtcaaaga tcttggatcc cattatatag     360
 tatgtatagc tgaaatctgt aattcaatca cttttctct tttatcctct aaccaaaaaa      420
 ttgtttaatt ttgcatccca aatgttttta atctttgtat attttttaaa aaycctttc     480
 tcctcatcat tgccttttt gtggttgtaa atagacttac ttgcactttg aagatgagtt     540
 actccttgtc atcttacaaa tatgtgatat ggtaattttc ataacagatg tcagttttga    600
 accaagaatt ggtgatttgt ttataagaaa aaaactggct tcatttctgt gaaattgctc     660
 tttgaaaatt tcttttaca cgtgtaagcc aactgagata ccgtgatggt gttgatttct      720
 ttcaatgatg cttaccatct attttagcca ctgagccttt tattatttgt ctatttgtaa     780
 agtttatttg tcttaactca tttaataaat atactgttta tctgtttctg aatggggact     840
 gaacttttg gatattgata ttgatttgaa aatatttttgg aatttttct acttgaaatt     900
 ttagaaatct aatkgaaaat tctataatgt actgaaagta wggttgtgta cagtgakcac     960
 tctctaataa tatgatgnct tgccctaaan gaggnnggac atgtcccact ttccaccacg    1020


<210> 199
<211> 524
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (75)
<223> n equals a,t,g, or c

<400> 199
 aattcccgca gctgagggtt gtgtgccntc gggcgagcca agtcttttga ccggaccctt      60
 cccggcgcag aaganctgaa gttgatttga gagcctgtkt ttggggttra gccgagctgc     120
 tgcgggctty gtcgccggcc aggacacaag ytacttgcaa cggggcggcg cctggcttat     180
 gatgttcctc aacccagggg cggcctctgc cctctactcg tgccaggccc acttgccagg     240
 caggagccct cccaagcct tcagggctgc tcggagtcac ctgttggaat ggactaaaag      300
 gaccctgtgt tgggaacagg tgctccaaac accctgctgc tggctgccag gcaggccctc     360
 tggaagggaa ggggcaggac tcatcaggac ctccctggac cctgcagggc aggcagttgg     420
 cccgagccca agcatttggc tctgcttgcc ccaagggac aggaagcctc ttgggcctct     480
 tccctcctg gacaaggccc cctgccttg cctcacataa actg                        524


<210> 200
<211> 332
<212> DNA
<213> Homo sapiens
```

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<400> 200
  gtgatacaag gaagggtgat catcatctgt caccatgcaa ttcctgctca cagcctttct      60
  gttggtgcca cttctggctc tttgtgatgt ccccatatcc ctaggcttct cccctccta     120
  gaagggcttc ttgatagatt agaaaataag aatgagtgac atttcctatg tgcatataag     180
  aaggagccac aagacatgtc ttttaaataa aaggacagtg tccatccttt tagctgccga     240
  atagaacctt ggtctcatcc tcctggagct aggscttaaa acagcttctg tgtttctsat     300
  tkgtctccart gttttgccaa ggttttattc gg                                  332


<210> 201
<211> 376
<212> DNA
<213> Homo sapiens

<400> 201
  ccagggaagc cccargcctg tcctgaattg acatcagtgc ttccctgaac tgcctccccc      60
  acccctgggc attatcccag gaaacttatg ttttctagaa gctaagcagc tgctgggact     120
  cagggactgg tgcaggtagg ctgagtggca gctcagtcct agaaggtctc tgaagatctg     180
  gactgaggac cytgctactc cccaagccag agcccatcag ccaggcctgc tgtgagccac     240
  ctgcctgtgg agtgctgagc tcaaccaaag gctggcaagc tctgggcctc atttaaggga     300
  ttctgatgag ccgatgggcc ctggaggcag cccattaaag catctggctc gttttttggaa     360
  aaaaaaaaa aaaaag                                                      376


<210> 202
<211> 741
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (361)
<223> n equals a,t,g, or c

<400> 202
  tcttgaagag tgtacagtac aggattatta taatgaaagt ttatatcaac agggtttcgt      60
  tggctctgca tatattataa gcaaaagaga ttggtaaagt gccacagtat tccagataac     120
  ttttcagttg cggcctttct tctcgttctt taatttgaaa cctagataca tgcagtaaaa     180
  actaggagaa tgacttttac ccttggggac agccaagttc tgttgataaa cctatttcct     240
  agcatgcctt caggaagttg tgccagaccc tagattgtga aggacccact gttcttctgt     300
  tgtacgagct ccctgaacca ttgttcagag gaccaatgtc acatcgcttc atgggcatgg     360
  nccatgggag catctgggtg atayctgtct acagtattgg ctcttctgcg aggctgatac     420
  acaaggcctc tcttccacat gatcatttgc aaacctcccc cagcccctac catccaatgt     480
  ggaaggaaaa caagaactgc ctgaagaaga gtccaagcta cagatacaca gcgtgtgcat     540
  tgcggctgtc accttcctcc tcccacttct gtatcctcag agatgctgcg tggatgtttc     600
  cttaacctca gctgacttcc ctgtgaattc ctaatgctag ttcagggcct ccaggcattg     660
  atttgtacag tggtaactcc caatgaggct tctgttatca tttggtgtgc tttytctgtc     720
  attaaaagaa atgattttcc c                                              741


<210> 203
<211> 1192
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (93)
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<223>  n equals a,t,g, or c

<400>  203
  cccagtatat ttctataaca tttattttag tgaacttata atgtttcttt gtattaaatt          60
  attagattat atctttagat aatattgtta ctnaattagt aggtaatata tattttattc         120
  aaaaataaat tgtgcatcta atgtctacca attaatgtac ttgtgatgt atcttatctt          180
  aacttgagtc tttgctgccc ctaatgaggt gtgaaggact cttctcccct ggggaagttt         240
  ttcttttca ggagggagga gggctttccc aggtaatgtg tctagagtgt tgggcagaar         300
  aatctgggac cacaccacac cagttctctc cttaatccac gtcatttgcc ttctatccca         360
  gctatgtttc cagtgtcctc tgggtgtttc caagagcaac aagaaaygaa taaatctctg         420
  ktgagttgtt tatttgttct tcactttgtt ttacactgta wttctgagt ttatgggtgt         480
  ctgtgaatta aaaaggaaaa gtrgaaataa gtaaaactca ggttgaagga aatatacata        540
  aataagataa agctgacctg tagatatarr caggttataa ragcttagag ttgtctaagt        600
  tgrgtgcaaa ktttcctctg atctttctga tgccgaraca aaaaaggcag tcatgtttgt        660
  watgtgattg gaatggaacc cgaraagaga gcaygctgtg ttcttgggga caggaaagct        720
  tgygtgcacc aagtctkaac caccaccttc atgggacata grttatgtgc tggaacatat        780
  ttcacaccgg cctggcagta aacacttgta gtgttgtgca gtggaaacgg tcatcttccg        840
  ctaaagcacg gcgtgttgtg cagcggaaat ggtcatctgc tgctaaaaca cagcttccat        900
  cgtaatgtat gctccttact caaagagtgt ggtcccaaac agcctttggg aggtcctcct        960
  tgattcatgg atgaaacctg gaacatcttg aggactgagt taaccatagg tccttaaata       1020
  actctccaca actttttctt agtttatctc tacatgcagg gtgtgcagca gcctgttcaa       1080
  agtcatattt tctgggaaat atttccagtg tttatttgca ctttagccca ctctgtgtag       1140
  ccttatttct tctaaaactca ccattaatct gaataatagt caaatttagg gg             1192


<210>  204
<211>  589
<212>  DNA
<213>  Homo sapiens

<400>  204
  atcttgggct atctttgaca ggggattctt gcaagttgat gctttctaca agtgaatata          60
  gtcagtcccc aaagatggag agcttgagtt ctcacagaat tgatgaagat ggagaaaaca         120
  cacagattga ggatacggaa cccatgtctc cagttctcaa ttctaaattt gttcctgctg         180
  aaaatgatag tatcctgatg aatccagcac aggatggtga agtacaactg agtcagaatg         240
  atgacaaaac aaaaggagat gatacagaca ccmgggatga cattagtatt ttagccactg         300
  gttgcaaggg cagagaagaa acggtagcag aagatgtttg tattgatctc acttgtgatt         360
  cggggagtca ggcagttccg tcaccagcta ctcgatctga ggcactttct agtgtgttag         420
  atcaggagga agctatggaa attaaagaac accatccaga ggaggggtct tcaggtgctg         480
  aggtggaaga aatccctgag acaccttgtg aaagtcaagg agaggaactc aaagaagaaa         540
  atatggagag tgttccggttg caccttctc tgactgaaac tcagtcccca                    589


<210>  205
<211>  847
<212>  DNA
<213>  Homo sapiens

<400>  205
  ggcacgagcg caagctgctg gccgccatca acgcggttccg ccaggtgcgg ctgaaacacc          60
  ggaagctccg ggaacaagtg aactccatgg tggacatctc caagatgcac atgatcctgt         120
  atgacctgca gcagaatctg agcagctcac cgggaaacag ggagaaacag attgacacgc         180
  tggcggggaa gctggatgcc ctgactgagc tgcttagcac tgccctgggg ccgagcagct         240
  tccagaaccc agccagcagt ccaagtagct ggaccacga ggaggaacca ggctactttc         300
  cccagtactg agtggtggac atcgtctctg ccactcctga ccagcctgaa caaagcacct         360
  caagtgcaag gaccaaaggg ggcctggctt ggatgggttg gcttgctgat ggctgctgga         420
  ggggacgctg gctaaagtcg ggaggccttg gcccacctga ggcccaggt gggaacatgg         480
  tcacccccac tctgcatacc ctcatcaaaa acactctcac tatgctgcta tggacgacct         540
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ccagctctca gttacaagtg caggcgactg gaggcaggac tcttgggtcc ctgggaaaga    600
gggtactagg ggcccggatc caggattctg ggaggcttca gttaccgctg gccgagctga    660
agaactgggt atgaggctgg ggcggggctg gaggtggcgc ccctggtgg gacaacaaag      720
aggacaccat ttttcagag ctgcagagag cacctggtgg ggaggaagaa gtgtaactca      780
ccagcctctg ctcttatctt tgtaataaat gttaaagcca gaaaaaaaa aaaaaaaaaa      840
aaaaaaa                                                               847
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<210> 206
<211> 852
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (55)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (318)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (363)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (380)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (383)
<223> n equals a,t,g, or c

<400> 206
  acaaacatac tcgcaggaag gagtctcatg ctgcccgcag catcagcgca acncntggcc     60
  gccatcaacg cgttccgcca ggtgcggctg aaacaccgga agctccggga acaagtgaac    120
  tccatggtgg acatctccaa gatgcacatg atcctgtatg acctgcagca gaatctgagc    180
  agctcacacc gggccctgga gaaacagatt gacacgctgg cggggaagct ggatgccctg    240
  actgagctgc ttagcactgc cctgggggcg aggcagcttc cagaacccag ccagcagtcc    300
  aagtagctgg acccacgnag gaggaaccag gctactttcc ccagtactga ggtggtggac    360
  atncgtctct tgccactccn tgnacccagc cctgaacaaa gcacctcaag tgcaaggacc    420
  aaagggggcc ctggcttgga gtgggttggc ttgctgatgg ctgctggagg ggacgctggc    480
  taaagtgggk aggccttggc ccacctgagg ccccaggtgg gaacatggtc acccccactc    540
  tgcataccct catcaaaaac actctcacta tgctgctatg gacgacctcc agctctcagt    600
  tacaagtgca ggcgactgga ggcaggactc ctgggtccct gggaaagagg gtactagggg    660
  cccggatcca ggattctggg aggcttcagt taccgctggc cgagctgaag aactgggtat    720
  gaggctgggg cggggcygga ggtgcgccc cctggtggga caacaaagag acaccattt      780
  ttccagagct gcagagagca cctggtgggg aggaagaagt gtaactcacc agcctctgct    840
```

```
  cttatctttg ta                                                          852
```

```
<210> 207
<211> 1354
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (465)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (794)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1344)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1349)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1350)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1352)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1354)
<223> n equals a,t,g, or c

<400> 207
  gattcggcac gaggcttgct ggagcaggag aagtctctrg ccggctgggc actggtgctg      60
  gcasgarctg gcattggact catggtgctg catgcagaga tgctgtggtt cgggggggtgc    120
  tcggctgtca atgccactgg gcacctttca gacacacttt ggctgatccc catcacattc     180
  ctgaccatcg gctatggtga cgtggtgccg ggcaccatgt ggggcaagat cgtytgcctg     240
  tgcactggag tcatgggtgt ctgctgcaca gccctgctgg tggccgtggt ggcccggaag     300
  ctggagttta acaaggcaga gaagcacgtg cacaacttca tgatggatat ccagtatacc     360
  aaagagatga aggagtccgc tgcccgagtg ctacaagaag cctggatgtt ctacaaacat     420
  actcgcagga aggagtctca tgctgcccgc aggcatcagc gcaanctgct ggccgccatc     480
  aacgcgttcc gccaggtgcg gctgaaacac cggaagctcc gggaacaagt gaactccatg     540
  gtggacatct ccaagatgca catgatcctg tatgacctgc agcagaatct gagcagctca     600
  caccgggccc tggagaaaca gattgacacg ctggcgggga agctggatgc cctgactgag     660
  ctgcttagca ctgccctggg gccgagggcag cttccagaac ccagccagca gtccaagtag     720
  ctggacccac gaggaggaac caggctactc tcccagtac tgaggtggtg gacatcgtct     780
  ctgccactcc tgancccagc cctgaacaaa gcacctcaag tgcaaggacc aaagggggcc     840
```

```
ctggcttgga gtgggttggc ttgctgatgg ctgctggagg ggacgctggc taaagtgggk      900
aggccttggc ccacctgagg cccaggtgg gaacatggtc acccccactc tgcataccct       960
catcaaaaac actctcacta tgctgctatg gacgacctcc agctctcagt tacaagtgca     1020
ggcgactgga ggcaggactc ytgggtccct gggaaagagg gyactagggg cccggatcca     1080
ggattctggg aggcttcagt taccgctggc cgagctgaag aactgggtat gaggctgggg     1140
cggggctgga ggtggcgccc cctggtggga caacaaaag gacaccattt ttccagagct     ·1200
gcagagagca cctggtgggg aggaagaagt gtaactcacc agcctctgct cttatctttg     1260
taataaatgt taaagccaga aaaaaataaa aaaaaaaaaa aaaaaactcg aggggggccc     1320
agacccaatc tccctatagt aagncgccnn anan                                 1354


<210> 208
<211> 1378
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (402)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1371)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1376)
<223> n equals a,t,g, or c

<400> 208
tccccaggtg cacagccagg gccctcctgt ctgcaggaga attcacagct ggtgtgggac       60
tcagccccta gnccattcaa agccttaatg ttgtaatcat atcttacgtg ttgaagacct      120
gactggagaa acaaaatgtg caataacgyg aattttatct tagagatctg tgcagcctat      180
ttctgtcaca aaagttatat tgtctaataa gagaagtctt aatggcctct gtgaataatg      240
taactccagt tacacggtga cttttaatag catacagtga tttgatgaaa ggacgtcaaa      300
caatgtggcg atgtcgtgga aagttatctt tcccgctctt tgctgtggtc attgtgtctt      360
gcagaaagga tggccctgat gcagcagcag cgccagctgt anataaaaaa taattcacac      420
tatcagacta gcaaggcact agaactggaa aagaccacag aaaacaaaga atccaaccct      480
ttcatcttac aggtgaacaa actgtgatga tgcacatgta tgtgtttgt aagctgtgag      540
caccgtaaca aaatgtaaat ttgccattat taggaagtgc tggtggcagt gaagaagcac      600
ccaggccact tgactcccag tctggtgccc tgtctacacc agacaacaca ggagctgggt      660
cagattcccc tcagctgctt aacaaagttc ctcgaacaga aagtgcttac aaagctgcct      720
tctcggatac tgaaaggtcg agttttctga actgcactga ttttattgca gttgaaaaaa      780
aaaaaaaagc attccaaaga tttcaagctg ttctgagaca tcttctgatg gctttacttc      840
ctgagaggca atgttttttac tttatgcata attcattgtt gccaaggaat aaagtgaaga     900
aacagcacct tttaatatat aggtctctct ggaagagacc taaattagaa agagaaaact      960
gtgacaattt tcatattctc attcttaaaa aacactaatc ttaactaaca aaagttcttt     1020
tgagaataag ttcacacaaa tggccacagc agtttgtctt taatagtata gtgcctatac     1080
tcatgtaatc ggttactcac tactgccttt aaaaaaaaaa accagcatat ttattgaaaa     1140
catgagacag gattatagtg ccttaaccga tatattttgt gacttaaaaa atacatttaa     1200
aactgctctt ctgctctagt accatgctta gtgcaaatga ttatttctat gtacaactga     1260
```

```
 tgcttgttct tattttaata aatttatcag agtgaaaaaa aaaaaaaaaa aaaaaaaaaa     1320
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagaa naaaanaa       1378
```

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<210> 209
<211> 1166
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (79)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (650)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1154)
<223> n equals a,t,g, or c

<400> 209
 aanccactgc antttaaacc ccctcccctc caagaaagtt cacaaccggc catggatgac      60
 cctcatttta gatgggccnc aatatttaag atggactgrg gmccccarag actgaccctt     120
 gaaaggggga ctcagaagaa agatccttga cattgccmaa catgctgggc ttgtccaaca     180
 cagtgatgcg gctcatcgag aarcgggctt tccmaggaca agtactttat gataggtggg     240
 atgctgctga cctgtgtggt catgttcctc gtggtgcagt acctgacatg agccagccac     300
 gctcagtggc tgaacagcat tcccacagcc tgcaagtgtg tgtgtgtgtg aaagagagag     360
 ggggcccaga ggccgccttt tgaaatgttt gcctgtctga actgtgaaga cacttgggag     420
 tgattgtggt ctaatttcca acctgctctg ttttctgtga catcttggag ggggagctag     480
 tgccamcacc atgcgcggtg cttaggaaat gaaagaagtc ccgggtctgt ctctctcact     540
 ctcgctctca mtggggggagg gaaagaatgg ctttggtggc tttgttcaca cagctgatgc     600
 gtgscctggg aaggtgtcca cagtgagccc tgtgtgcagg actgtccacn acggttcaca     660
 ccttgtcacc atcaggcctt tctggctcct gatagggtgg agcaaaagtg gaaaggaaag     720
 gaaagaggcy ttttctcaca gccattatat taaatagtag gtcgattcac atcytcgtgc     780
 tcctggccac cctcccctgt gcctcagtga catgtagatg actgactgcc aatacttgtc     840
 accattccct ggaagcagct acctagggga aacaagatgt agtgctattg ccgataacaa     900
 gtaagatttt ccacactaca gctgggtgtt tctcttttct aaagtgaggc cagtgttatt     960
 tcccgggagt gttcagtctt gaccctagtc actgattttt tctagttgtt aatagagtgg    1020
 ttgggctttt aaggttcaga gactgtgggc ttgggcacct gcgcccaggg stttttgtggg    1080
 ggcctttgcc ccttagraaa gtagctttta ggggcaaaga tttgttgatt ttccccatta    1140
 cagtcttcag ctcnaggggtt ttaaaa                                        1166
```

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<210> 210
```

```
<211> 697
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (459)
<223> n equals a,t,g, or c

<400> 210
  tacttctagg attataagga attaacattg agatgacatt tccatttgag aaggaaaata      60
  gttgctttca gtgcctttta tttgattcct ggagagagca gactcgcacs aacattcaac     120
  cccagcgctg atatgacagt aatcctcaga ggcagagccc agcacaaaac agcaatgcta     180
  gaaagttaca attggaaagt ttcctgccag cttcgggaat gacactgcaa agctgatgcc     240
  agaaactgcc agrgtaattc tcctcattac tgctctaccc acccactttc agctccccaa     300
  attaactagt gcagttgact aattctcttt accttatca tttarggtga rgcattgcac      360
  aaaaactctc gactttgcca tataagggct gtggttctct gtggtcccct ggataagagg     420
  catcaccatt atctggaaac atgcagtaaa tgcagattnt tcatcttctc cccagacctc     480
  ctgagttaga aattcacaag ttctccaggt gatctcatac atgctaaagt ttgagaacca     540
  ttgagtaaag ttaatgcatt aagaagagat tagataggga tggtggcgta tcttcctaca     600
  gtttccctgt taacaagaaa gtcagaggtc agttgatcag acattagatt atttattgct     660
  aaaactaaaa aaaattaaaa aaaactggag gggggcc                             697


<210> 211
<211> 932
<212> DNA
<213> Homo sapiens

<400> 211
  cgtgagtcac ctctctatag tgggcgtggc cgaggccggg gtgaccctgc cgaagcctcc      60
  gctgccagaa accatgttca aggtaattaa aaggtccgtg gggccagcca gcctgagctt     120
  gctcacccttc aaagtctatg cagcaccaaa aaaggactca cctcccaaaa attccgtgaa     180
  ggttgatgag ctttcactct actcagttcc tgagggtcaa tcgaagtatg tggaggaggc     240
  aaggagccag cttgaagaaa gcatctcaca gctccgacac tattgcgagc catacacaac     300
  ctggtgtcag gaaacgtact cccaaactaa gcccaagatg caaagtttgg ttcaatgggg     360
  gttagacagc tatgactatc tccaaaatgc acctcctgga tttttttccga gacttggtgt     420
  tattggtttt gctggcctta ttggactcct tttggctaga ggttcaaaaa taaagaagct     480
  agtgtatccg cctggtttca tgggattagc tgcctccctc tattatccac aacaagccat     540
  cgtgtttgcc caggtcagtg gggagagatt atatgactgg ggtttacgag gatatatagt     600
  catagaagat ttgtggaagg agaactttca aaagccagga aatgtgaaga attcacctgg     660
  aactaagtag aaaactycat gytctgccat cttaatcagt tatrggtaaa cattggaaac     720
  tccatagaat aaatcagtat ttctacagaa aaatggcata gaagtcagta ttgaatgtat     780
  taaattggct ttcttcttca ggaaaaacta gaccagacct ctgttatctt ctgtgaaatc     840
  atcctacaag caaactaacc tggaatccct tcacctagag ataatgtaca agccttagaa     900
  ctcctcattc tcatgttgct atttatgtac ct                                  932


<210> 212
<211> 661
<212> DNA
<213> Homo sapiens

<400> 212
  gtcattcttt aaataaaagc tttcctgttt aaagcttttc aaaggagcag accaccttga      60
  agattccccc tagggttgat atgtgtctaa ttcattttat aaaaattatt cttgtcttca     120
  ttttaaagct ttggctatat agtcagaaat gtcctaaata acaaactatt ttgtatttaa     180
  tttagggaag actaaaggga agaaaaatga aaactcagtc tttatgtaag ctccaaggat     240
```

```
attagggctt aaagggcttt tctagtttta tgagaatttg tactactgat ttttatatat    300
tcctgttttt gagatgaaca gatctctggg gaaattgttg agttacaatg gcatttcact    360
gtgatccctc tcaagctcag atcagttcta taacccaatg acaacctgtc tctttggttt    420
actgtcctgt gaaatgtcag ctcaagtttc ccagaagtcg tgtgtttatg atgagtcaga    480
gtgctttccc tcggtgggac agttgctggc cctcttaatt ttggtgtatg tgcttccaag    540
tatctaaacc tccagtctga tctgtatatg ctatccctaac tgttaattgt attattgatt    600
atgttgatta tcttgcttga aggttcatac ttttcaattt gatagaaata aagtcttttt    660
c                                                                    661
```

<210> 213
<211> 592
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (394)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (545)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (566)
<223> n equals a,t,g, or c

<400> 213
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gaaactgaca ttgttaaaca cactaaaaca gaagtactta cctcttgaag atttaatata     60
taatggttga catgatacat gtacatgaat ggaatgacca gatgcttatg gtctacattt    120
tcctttatcc tgttagtatt accttcctta atctttgttc cttaacatgc taaattcctc    180
ttcagtgtt attttctagt gacagaatgc taacatttct tacaccctgg cagaagggag    240
agaaatgtgt tttggggtgg gtaactaaat ttttgagtga aatatcataa gatgagaatg    300
gaaagaggga gacacaaaga gttataacaa aaaaacaatg gtttttttag ccatttgact    360
ggctctttaa atagtctaca agacattcac gttnaacatc acttttagtg aaataaaatg    420
tgccatacta gtatgtgctt caaaagggca aatgtgcttt agtgccctaa ggctaaattt    480
tggtcatttg acatcagaga tgttgtaagt attgcactta atacgcacct atttctcaat    540
agtgntattt ttttggctag catttncttt accactaacc ttgttggata gc            592
```

<210> 214
<211> 938
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (100)
<223> n equals a,t,g, or c

<400> 214
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tggagtggct ttccagctga atgaatccta tgtctcgcgt gcaggtggtt ggttttcaat     60
gttcttscta atttttttcc tattggctct tgggagtttn ctttgtttgc tcctgtgttt    120
gcccagcttt aataaaaacca ggcgcaaaca aaaaccatag cattctgaaa caataggggg    180
cccacattgg acccagtatg tcactttaat ggacttcaag aaaaaaatctg aatgggaaaa    240
```

```
           tgacactagg aatgtatact ccacacattt tatgccatat aatggtgtgt tttcttaatt      300
           ttgtttcttg tggcgaaatg tggctttcaa attaaaatgm cctttcttc ttkgaaactt         360
           tttgtttkga ctkgtataat taagggtttg gaaagattca taattmtgag agaggtttgc         420
           aaccaggaga tacaaagaag tctcagtagt aatcttgttc atgtgctttt acagccagct         480
           acatttaagr atgtattagt tacagaaatt atatgtctgt gtatgtgtct ctactcaata         540
           aagtacatgc ctccacataa tgcggtgctg tccatctcgg caaatactgg ccaagtccct         600
           ttatgacagg cacacagaaa ccatagcatg gtctggcttt cagaaaatgc ctctcatctt         660
           tcctggaacc ttattttgct aaatgtctgt tttcttgtga tttgttgtac ctcacagcac         720
           cattgtgacc atggtgatgc ctcatttgca tgatatgtac cttgtgttta atgtgaaata         780
           cattttcatt gaagagtctg atgacttgct agcgttttat tttttctgta agctcaatgt         840
           gctgaaacca aaccaggctt ttaaaaacct gtgtagaaga aaaccaaaaa atcctgtgtg         900
           ggtgtccttt ccctgtcaaa ctcattaaaa attcctttt                                938


<210> 215
<211> 1079
<212> DNA
<213> Homo sapiens

<400> 215
           agcctgccgg gagagtggtg gcatctcrara ggctggtcgt ggactgtggt tggggaggt          60
           gggagctgtt ttaaccgtgt gccccctctc ctgtgcckgc gtgggcatcc cccggggcag         120
           tggaacgcgg gcgctcctcc agcttccgag tccagccagc ctgggcgcgg ggcgcgcccc         180
           cgagacaccc gaggagtccg ttcctccctg gttacgtgga ctgtggagct ggtctcttgt         240
           ggctcagcgc cgtgcggagg ttgaagcgta cctgcggagg tcgcaccagg ggcgtgagga         300
           ggaggaggaa gggcatgagc cgagcttgag gaatccgtgy tccaaactct acactcaagg         360
           rtgcmctgcg caactctggt ggcgatgggc tggggcagat gtccttggag ttctaccaga         420
           agaagaagtc tcgctggcca ttctcagacg agtgcatccc atgggaagtg tggacggtca         480
           aggtgcatgt ggtagccctg gccacggagc aggagcggca gatctgccgg gagaaggtgg         540
           gtgagaaact ctgcgagaag atcatcaaca tcgtggaggt gatgaatcgg catgagtact         600
           tgcccaagat gcccacacag tcggaggtgg ataacgtgtt tgacacaggc ttgcgggacg         660
           tgcagcccta cctgtacaag atctccttcc agatcactga tgccctgggc acctcagtca         720
           ccaccaccat cgcgcaggctc atcaaagaca cccttgccct ctgagcgtcg ctggatctct         780
           gggagctcct tgatggctcc cagaccttgg cttttgggaa ttgcactttt gggcctttgg         840
           gctctggaac ctgctctggg tcattggtga gacttggaag gggcagcccc cgctggcttc         900
           ttggtttttgt ggttgccagc ctcaggtcat ccttttaatc tttgctgacg gttcagtcct         960
           gcctctactg tctctccata gccctggtgg ggtccccctt ctttctccac tgtacagaag        1020
           agccaccact gggatgggga ataaagttga gaacatgagt ttgggctgaa aaaaaaaaa        1079


<210> 216
<211> 3791
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3671)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3682)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3771)
```

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3779)
<223> n equals a,t,g, or c

<400> 216

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tgaagcaggc gctcttggct cggcgcggcc cgctgcaatc cgtggaggaa cgcgccgccg      60
agccaccatc atgcctgggc acttacagga aggcttcggc tgcgtggtca ccaaccgatt     120
cgaccagtta tttgacgacg aatcggaccc cttcgaggtg ctgaaggcag cagagaacaa     180
gaaaaaagaa gccggcgggg gcggcgttgg gggccctggg gccaagaccg catcagggcg     240
gcggcccaga ccaactccaa cgcggcaggc aaacagctgc gcaaggagtc ccagaaagac     300
cgcaagaacc cgctgcccc cagcgttggc gtggttgaca agaaagagga gacgcagccg     360
cccgtggcgc tttaagaaag aaggaataag acgagttgga agaagacctg atcaacaact     420
tcagggtgaa gggaaaataa ttgatagaag accagaaagg cgaccacctc gtgaacgaag     480
attcgaaaag ccacttgaag aaaagggtga aggaggcgaa ttttcagttg atagaccgat     540
tattgaccga cctattcgag gtcgtggtgg tcttggaaga ggtcgagggg gccgtggacg     600
tggaatgggc cgaggagatg gatttgattc tcgtggcaaa cgtgaatttg ataggcatag     660
tggaagtgat agatcttctt tttcacatta cagtggcctg aagcacgagg acaaacgtgg     720
aggtagcgga tctcacaact ggggaactgt caaagacgaa ttaactgact tggatcaatc     780
aaatgtgact gaggaaacac ctgaaggtga agaacatcat ccagtggcag acactgaaaa     840
taaggagaat gaaggttgaag aggtaaaaga ggagggtcca aaagagatga ctttggatga     900
gtggaaggct attcaaaata aggaccgggc aaaagtagaa tttaatatcc gaaaaccaaa     960
tgaagtgtct gatgggcagt ggaagaaggg attgtttctt cataaatcaa agagtgaaga    1020
ggctcatgct gaagattcgg ttatggacca tcatttccgg aagccagcaa atgatataac    1080
gtctcagctg gagatcaatt ttggagacct tggccgccca ggacgtggcg gcagggagg    1140
acgaggtgga cgtgggcgtg gtgggcgccc aaaccgtggc agcaggaccg acaagtcaag    1200
tgcttctgct cctgatgtgg atgacccaga ggcattccca gctctggctt aactggatgc    1260
cataagacaa ccctggttcc tttgtgaacc cttctgttca aagcttttgc atgcttaagg    1320
attccaaacg actaagaaat taaaaaaaa aagactgtca ttcataccat tcacacctaa    1380
agactgaatt ttatctgttt taaaaatgaa cttctcccgc tacacagaag taacaaatat    1440
ggtagtcagt tttgtattta gaaatgtatt ggtagcaggg atgttttcat aattttcaga    1500
gattatgcat tcttcatgaa tacttttgta ttgctgcttg caaatatgca tttccaaact    1560
tgaaatatag gtgtgaacag tgtgtaccag tttaaagctt tcacttcatt tgtgtttttt    1620
aattaaggat ttagaagttc cccaattac aaactggttt taaatattgg acatactggt    1680
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catttttggg gaaataatctt tttcacttc tcatgatagc tgttatatat atatgctaaa    1860
tcttatata cagaaatatc agtacttgaa caaattcaaa gcacatttgg tttattaacc    1920
cttgctcctt gcatggctca ttaggttcaa attataactg atttacattt tcagctatat    1980
ttactttta aatgcttgag tttcccattt taaaatctaa actagacatc ttaattggtg    2040
aaagttgttt aaactactta ttgttggtag gcacatcgtg tcaagtgaag tagttttata    2100
ggtatgggtt tttctcccc cttcaccagg gtgggtggaa taagttgatt tggccaatgt    2160
gtaatattta aactgttctg taaaataagt gtctggccat ttggtatgat ttctgtgtgt    2220
gaaagtcccc aaaatcaaaa tggtacatcc ataatcagcc accatttaac ccttccttgt    2280
tctaaaacaa aaaccaaagg gcgctggttg gtagggtgag gtgggggagt atttttaattt    2340
ttggaatttg ggaacgagac agctttactt tgtaaggttg gaacagcagc actatacatg    2400
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aagttgata ttcacagaa agtggtaatt atctcttctc tcttcctcca ttagaaacatt    2520
aggtaaataa tggattccta taatgggagc atcaccactt attaaaacac acatagaatg    2580
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gaaggaattt ttaaaaaatt tttaagaatt gtttgtcacg tcatttttag aaatgttcta    2700
cctgtatatg gtaatgtcca gtttaaaaa tcttggacat cttcaatctt aaacatttct    2760
atttagctga ttggttctca catatacttc taaaagaaac tttttatgtta taagagttac    2820
tttttggata agatttatta atctcagtta cctactattc tgacattttta ggaaggaggt    2880
aattgttttt aatgatggat aaacttgtgc tggtgttttg gatcttatga tgctgagcat    2940
gttctgcact ggtgctaatg tctaatataa ttttatattt acacacatac gtgctaccca    3000
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gagattaatt tagtccatat gaactattga cccattgttc attgagacag caacatacgc   3060
actcctaaat cagtgtgttt agactttca agtatctaac tcatttccaa acatgtacca    3120
tgttttataa acctcttgat ttccagcaac atactataga aaacacctgc tactcaaaac   3180
acaacttctc agtgtcatcc attgctgtcg tgagagacaa catagcaata tctggtatgt   3240
tgcaagcttt caagatagcc tgaacttaaa aagttggtgc attagttgta tctgatggat   3300
ataaatttgc ctcctagttc actttgtgtc aagagctaaa actgtgaacc taactttctc   3360
ttattggtgg gtaataactg aaaataaaga tttattttca tgctcacttc ttaaaagtca   3420
taaaaacaat caaataggrt catgtttatt gtcatgtgtt tcctggkttc tgacctgtgt   3480
gcacacccct gtgtgtttat aattttttaaa ttgaatttta tatggggttt ttatttgcta   3540
aaaacaggc tgttgaatca catttgggaa gggtacttat cttaatgact aatgacttaa    3600
ttgggaaagt tgaattcttg taaaatacaa aatccaagga cttcttggga tttaatctaa    3660
ttgtcacttc nttaggcaga tncacttttt tggataatgg aaagttaagc ataccgaatg    3720
ctactttggg ttgacaaacg ggcctaatag tccgggggga aatccctaac nggtaaggnt    3780
cccaagtatg g                                                         3791
```

<210> 217
<211> 1334
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (199)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1265)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1267)
<223> n equals a,t,g, or c

<400> 217
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cagtgctcgc tcctgctcgg ggcgctgcgg cccggggcgt cgccatgacc agtgagctgg    60
acatcttcgt ggggaacaga cccttatcga cgaggacgtg tatcgcctct ggctcgatgg   120
ttactcggtg accgacgcgg tggccctgcg ggtgcgctcg ggaatcctgg agcagactgg   180
cgccacggca gcggtgctnc agagcgacac catggaccat taccgcacct tccacatgct   240
cgagcggctg ctgcatgcgc cgccaagct actgcaccag ytcatcttcc agattccgcc    300
ctcccggcag gcactactca tcgagaggta ctatgccttt ratgaggcct ttgttcggga   360
ggtgctgggc aagaagctgt ccaaaggcac caagaaagac ctggatgaca tcagcaccaa    420
aacaggcatc accctcaaga gctgccggag acagtttgac aactttaaac gggtcttcaa    480
ggtggtagag aaaatgcggg gctccctggt ggacaatatt cagcacaact tcctcctctc    540
tgaccggttg gccagggact atgcagccat cgtcttcttt gctaacaacc gctttgagac    600
agggaagaaa aaactgcagt atctgagctt cggtgacttt gccttctgcg ctgagctcat    660
gatccaaaac tggaccccttg gagccgtcga ctcacagatg gatgacatgg acatggactt    720
agacaaggaa tttctccagg acttgaagga gtccaaggtg ctagtggctg acaaggacct    780
tctggacctg cacaagagcc tggtgtgcac tgctctccgg ggaaagctgg gcgtcttctc    840
tgagatggaa gccaacttca agaacctgtc ccggggggctg gtgaacgtgg ccgccaagct    900
gacccacaat aaagatgtca gagacctgtt tgtggacctc gtggagaagt ttgtggaacc    960
ctgccgctcc gaccactggc cactcagcga cgtgcgggttc ttcctgaatc agtattcagc   1020
gtctgtccac tccctcgatg gcttccgaca ccaggcctct gggaccgcta catgggcacc   1080
ctccgcggct gcctcctgcg cctgtatcat gctgggggtc cctcccaaacg ctccgcccaa   1140
gctgacaata aagttgctct gagtttggag actggtcctc gctccgggga gcaagtgggg   1200
ggcgtgcaga tgtgcctgtg tctgtctctg agcacctggt gtccgtgtac aaggatggat   1260
```

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  gtgtncngtg gctccttggg aactgagaca tatctcaggg aatggtgtct gtgctcagcc       1320
  catccaccag aaga                                                          1334


<210> 218
<211> 1511
<212> DNA
<213> Homo sapiens

<400> 218
  gtggcgggga tgctgcgagg gggtctcctg ccccaggcgg gccggctgcc taccctccag         60
  actgtccgct atggctccaa ggctgttacc cgccaccgtc gtgtgatgca ctttcagcgg        120
  cagaagctga tggctgtgac tgaatatatc ccccgaaac cagccatcca cccatcatgc         180
  ctgccatctc ctcccagccc cccacaggag gagtaggacc tcatcaggct tctccgccgg        240
  gagatagcag cagtttttcca ggacaaccga atgatagccg tctgccagaa tgtggctctg        300
  agtgcagagg acaagcttct tatgcgacac cagctgcgga aacacaagat cctgatgaag        360
  rtcttcccca accaggtcct gaagcccttc ctggaggatt ccaagtacca aaatctgctg        420
  cccctttttg tggggcacaa catgctgctg gtcagtgaag agccaaggt caaggagatg        480
  gtacggatct taaggactgt gccattcctg ccgctgctag gtggctgcat tgatgacacc        540
  atcctcagca ggcagggctt tatcaactac tccaagctcc ccagcctgcc cctggtgcag        600
  ggggagcttg taggaggcct cacctgcctc acagcccaga cccactccct gctccagcac        660
  cagccctcc agctgaccac cctgttggac cagtacatca gagagcaacg cgagaaggat        720
  tctgtcatgt cggccaatgg gaagccagat cctgacactg ttccggactc gtagccagcc        780
  tgtttagcca gccctgcgca taaatacact ctgcgttatt ggctgtgctc tcctcaatgg        840
  gacatgtgga agaacttggg gtcggggagt gtgtttgtca cttggttttc actagtaatg        900
  atattgtcag gtatagggcc acttggagat gcagaggatt ccatttcaga tgtcagtcac        960
  cggcttcgtc cttagttttc ccaacttggg acgtgatagg agcaaagtct ctccattctc       1020
  caggtccaag gcagagatcc tgaaaagata gggctattgt ccctgcctc cttggtcact       1080
  gcctcttgct gcacgggctc ctgagccacc ccttgggggc acaacctgcc actgccacag       1140
  tagctcaacc aagcagttgt gctgagaatg gcacctggtg agacctggta gtgtgccagg       1200
  ctttgtgctg agtgctgtac atgtattagt tcctttactg ctgaccacat tgtacccatt       1250
  tcacagagaa ggagcagaga aattaagtgg cttgctcaag gtcatgcagt tagtaagtgg       1320
  cagaacaggg acttgaacca agccctctgc tctgaagacc gcgtcctgaa tttcttcact       1380
  agagcttcat catcaggtta cccagaagtg ggtccatcc accatccagg tgtgtcttgga       1440
  tgttagttct ccaccctcga ggtgtacgct gtgaaaagtt tgggagcact gctttataat       1500
  aaaatgaaat a                                                             1511


<210> 219
<211> 642
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (633)
<223> n equals a,t,g, or c

<400> 219
  aggccttact tttcctccca caaaggagtc gcagccacgc tagctctgac ttgccactgt         60
  gacaaagttc acgtagcagg tctaggcaaa gactgggcaa ttgagcagag gagacggacc        120
  tgtgagtctg accrygagsc ggrcccttc accttggctg ggctggtcct ggtccttagg        180
  ttttgtcagg ttgtccttgt ttggatccct caactaggtg ataagcactg gaggggatg        240
  acccgccttg gacgtgtttc tttaacctca tccatataat aggggccgtgg gatggttgta        300
  gaggtaaagc aggatgatgg tgttttaaga ccagagcttg ggaccagggc tcctacacct        360
  aattttctct cctggtagct gaacaaaggt ctaaattagc ttaacaaaag aacaggctgc        420
  cgtcagccag agttctgaag gccatgcttt cagtttccct tgttgacaat tgctctccag        480
  ttcctatgaa agcacagagc cttagggggc ctggccacag aacacaacca tcttaggcct        540
```

```
  gagctgtgaa cagcaggggg ttgtgtgtct gttctgtttc tctgcttgcc gaacttcctc      600
  aataaaccct atttcttatt ttatatttac gtnggtgctg gg                         642
```

<210> 220
<211> 1241
<212> DNA
<213> Homo sapiens

<400> 220
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  ggtcccactg ttccatttta tgctaataga ttccattcta gggcccagcc gtctcttgac       60
  tgatggtgtt ccctttaacc cttggcatgt ataatagaat tttggtgaat gaaagaaccc      120
  aaataggcca gatagtcccc ccaggccctg atatccataa aaggcttggg aatgcattat      180
  gtaattgtcc ttagtctttt tgttgtttta gaaaaaaaaa acaagatggg ctcagatgga      240
  tgcctacgta aaaatggttc ctagctgtgt actcataact tttctttgaa ttgagtagtg      300
  aaaggaagga ggaggaaagg aaattaaatg tccttctagt attctctgga ctcaagtctg      360
  acatatgtga taataaccta tattgaaatg ccaagaattg tatctgaaac aagrgaacag      420
  tttgacacat ttatcatgcc ttcatattac atattaactg aaaccaatta ataaacatat      480
  gaaatatcca ttgcacaagg caaaggcacc taaacctttt gtttcttttt ctacatagca      540
  gaaattgatt ttttttttat tttcttaggg gaacctacat aattatgacc cagtgatgtc      600
  ttttggtgac ttaagcttat gaattcaggt tacaattgag ttgattctag atggttacta      660
  ccttgaaaag gatgttggtg ccttatgtga cacgagccag agcctgctgg gaataaacaa      720
  agcagattca tgccaacacc aactcgtagc tttagtggca gatgggagtg gtcacagact      780
  cccaaaatgt ggggcttttgg atttccacac catcccacgt gtgtgtcatc ttcctctttc      840
  acactcttga tgataacttg aaaatgrtga aatcaccttct gaatttgcct atagcatgag      900
  cacattctta tgcaacacata acaaatagtt cataatgtga atattagaaa ctgttacagc      960
  ctgcagttac cataattttc catgtttgtg gaattgatat tgaaaatagca gggctaagga     1020
  attactggca agtttttagc tgtgggtaat accttagggt tatttaaata tttgtaattt     1080
  tatttaaatg ttcatgaatg tttgaaagga acaaaattat cagggatggc tctttgccat     1140
  gggtcttatt ttcaccctct tttctgtaag aaaaaagaac aatgtcttaa tgtattttta     1200
  aagtttttgg tatagttttct aattccaatt ttaataaaag t                        1241
```

<210> 221
<211> 504
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (56)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (489)
<223> n equals a,t,g, or c

```
<400> 221
cggattttct aggaccccaa aaaaaaaaaa agggnaaaaa aaaccccncaa aaccanccaa        60
aaccccaaaa aaaaaaaaaa tccacaaaaa caaaaaaact ataaaaaaga aagaattaaa       120
aactttcaga gaattactat ttactttatt aacttacgga tttattatat aaatatatat      180
tcacctagca acatatctct gccgtctctc ctgctctcat aatgaagaca tagccgattc      240
tctgcccggg cccttgctg atgctcctcc gggtctgcgt cgggcgtggg tctctgggga       300
ccctccagag gtggaggtgg gctgatggcc tggctgcctg gtggttgatg gtttgctcc       360
ccctaccttt tttttttgag tttattctga ttgattttttt ttcttggttt ctggataaac     420
caccctctgg ggacaggata ataaaacatg taatattttt aagaaggaaa aaaaaaaaaa      480
aaaaaactng ggggggggccc cgaa                                           504
```

```
<210> 222
<211> 1080
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1026)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1050)
<223> n equals a,t,g, or c
```

```
<400> 222
tgtttatgtg acctaaaaca tacacacatg cacacacaca tacatatcca ttcattcatt        60
cattcaagtg gtgtttccag tgtctgtgtg tcactgttta tgcagtttcc atttcccagt      120
gaattatgag tggagggcaa cttttctaac cagattgtct tttcagaaca aagcacckggg     180
rattgaggaa gagtttggaa agagggagag gcaaggaaag agagctttaa attgaaaggt      240
taatttccta agaggaacct gggctgaatg actacagtgt tataccctcc aatctttgca      300
ggtgggcatg gaacactgct tgtatcactc tgtgcacggt ataaatccat atatccacaa      360
aaacacacat ccatccatca acatatacat ggtttgggat gagcaggtca atagtttga       420
gagggagttt gttccttttt tttttctcatt atactcttaa attgttgtca gttatcaaac     480
aaacaaacag aaaaattgtt tgggaaaaac cttgcatacg ccttttctat cmagtgcttt     540
aaaatataga ctaaatacac acatcctgcc agtttttttct tacagtgaca gtatccttac     600
ctgccattta atattagcct cgtatttttc tcacgtatat ttacctgtga cttgtatttg     660
ttatttaaac aggaaaaaaa acattcaaaa aaagaaaaat taactgtagc gcttcattat      720
actattatat tattattatt attgtgacat tttggaatac gtttgtttttt tatctcttgc     780
atatacttta tacggaagta ttacgcctta aaaatacgaa aataaatttt acaaggtttc     840
tgttttgtgt ggaagagtaa ttgatgttgc taagaatgat gtttgtttttt ttggggtttt    900
tgttgttttt tttttaaatg ttaccagcac ttttttttgta agtttcactt tccgaggtat    960
tgtacaagtt cacactgttt gtgaagtttg aatatgaagg aataattaaa aaaaaaaaaa     1020
aaaccncggg gggggcccgg tcccattggn cccaaggggg cggttacggg gtcacggccg     1080
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<210> 223
<211> 1258
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1226)
<223> n equals a,t,g, or c
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<400> 223
tgaattgagg gcttaaagat aaacatatgg grttggagtt gtgtgtccat agggtttcac        60
tgcctatttg atttgagttt atccctatta atttttaca attgaaatttt attaaagtat       120
aatgtacata tattttcagt ggattttgct ctgaaggttc tccagtggtc tgactacgag       180
atagtgcggc ttcagctgtg ggatattgca gggcaggagc gcttcacctc tatgacacga       240
ttgtattatc gggatgcctc tgcctgtgtt attatgtttg acgttaccaa tgccactacc       300
ttcagcaaca gccagagdtg gaaacaggac ctagacagca agctacacct acccaatgga       360
gagccggtgc cctgcctgct cttggccaac aagtgtgatc tgtcccttg ggcagtgagc        420
cgggascaga ttgaccggtt cagtaaagag aacggtttca caggttggac agaaacatca       480
gtcaaggaga acaaaaatat taatgaggct atgagagtcc tcattgaaaa gatgatgaga       540
aattccacag aagatatcat gtcttgtcc acccaagggg actacatcaa tctacaaacc        600
aagtcctcca gctggtcctg ctgctagtag tgtttggytt attttccatc ccagttcttgg      660
gaggtctttt aagtctcttc ccttttggttg cccacctgac matttttatta agtacatttg    720
aattgtctcc tgactactgt ccagtaagga ggccattgt cacttagaaa agacacctgg        780
aacccakgtg catttctgca tctcctggat tagcctttsa catgttgctg rctcacatta       840
gtgccagtta gtgccttcgg tgtaagatct tctcatcagc cctcaatttg tgatccggaa       900
ttttgtgaga aggatkagaa atcagcacct gcgttttaga gatcataatt ctcacctact       960
tctgagcttt ttttttccat tgatattcat tgatatcatg acttccaatt gagaggaaaa     1020
tgagatcaaa tgtcatttcc caaatttctt gtaggccgtt gtttcagatt ctttctgtct     1080
tggaatgtaa acatctgatt ctggaatgca gaaggagggg tctgggcatc tgtggatttt     1140
tggctactag aagtgtgtccca gaagtcactg tattttttgaa acttctaacg tcataattaa   1200
gtttctcttg tcttgggcat caagantagt tccaattttt tgggccgggg cagggtgg       1258


<210> 224
<211> 1693
<212> DNA
<213> Homo sapiens

<400> 224
cacaatatat gaaatagtac cctctaaaaa agagaaaaaa aaaatcaggc ggtcaaactt        60
agagcaacat tgtcttatta aagcatagtt tattcacta gaaaaaattt aatatcaagg        120
actattacat acttcattac taggaagttc tttttaaaat gacacttaaa acaatcactg       180
aaaacttgat ccacatcaca ccctgtttat tttccttaaa catcttggaa gcctaagctt       240
ctgagaatca tgtggcaagt gtgatgggca gtaaaataccc agagaagatg tttagtagca       300
attaaaggct gtttgcacct ttaaggacca gctgggctgt agtgattcct ggggccagag       360
tggcattatg tttttacaaa ataatgacat atgtcacatg tttgcatgtt tgtttgcttg       420
ttgaattttt gaacagccag ttgaccaatc atagaaagta ttactttctt tcatatggtt       480
tttggttcac tggcttaaga ggtttctcag aaatatcatg gccacagcag cataccagtt       540
tccatcctaa taggaatgaa attaattttg tatctactga taacagaatc tgggtcgcact      600
gaaaaaaaat catttttatcc gtcttttaag tatatgttta aaataataat ttatgtgtct     660
gcatattgca gaacagctct gagagcaaca gtttccatt aactctttct gaccaatagt        720
gctggcaccg ttgcttcctc tttgggaaga gacaaagggtg tgtgacagtg gctaacaatc      780
ttcaaatacc caaattgtga tagcataaat aaagtattta ttttatgcct cagtatatta      840
ttatttaatt ttttaggtaa tgcctatctc ttggtctatt aaggaaagaa gcaatcagta       900
gagaattcag gatagtttttg tttaaatttct tgcagattac atgtttttac agtggcctgc      960
tattgaggaa aggtattctt cyatacaact tgttttaacc tttgagaaca ttgacagaaa      1020
ttatgcaatg gtttgttgaa atacggactt gatggtgctg tttaatcagt ttgcttccaa     1080
agtggcctac tcaagaggcc ctaagactgg tagaaattaa aaggatttca aaaacttttct   1140
attccttttct taaacctacc agcaaaactag gattgtgata gcaatgaatg gtatgatgaa   1200
gaaagtttga ccaaatttgt tttttgttg ttgttgttgt tttgaatttg aaatcattct    1260
tattccctt aagaatgttt atgtatgagt gtgaagatgc tagcgaaact atgctcagat     1320
attcatcgta agtctccctt cacctgttac agagtttcag atcggtcact gatagtatgt     1380
atttcttttag taagaatgtg ttaaaattac aatgatcttt taaaaagatg atgcagttct    1440
gtatttattg tgctgtgtct ggtcctaagt ggagccaatt aaacaagttt catatgtatt     1500
tttccagtgt tgaatctcac acactgtact tttgaaaattt ccttccatcc tgaataacga    1560
atagaagagg ccatatatat tgcctcctta tccttgagat ttcactacct ttatgttaaa     1620
agttgtgtat aattgttaaa atctgtgaaa gaataaaaag tggatttaaa ttaaaaaaaa     1680
```

```
    aaaaaaaaaa aaa                                                                 1693


    <210> 225
    <211> 1196
    <212> DNA
    <213> Homo sapiens

    <220>
    <221> SITE
    <222> (30)
    <223> n equals a,t,g, or c

    <400> 225
    acgcgtgggt cgacccacgc gtccgcgacn tggcgtggtg gggaagggag aaggatttgt        60
    aaacccggga gcgaggttct gcttaccga ggccgctgct gtgcggagac ccccgggtga        120
    agccaccgtc atcatgtctg accaggaggc aaaaccttca actgaggact tgggggataa        180
    gaaggaaggt gaatatatta aactcaaagt cattggacag gatagcagtg agattcactt       240
    caaagtgaaa atgacaacac atctcaagaa actcaaagaa tcatactgtc aaagacaggg       300
    tgttccaatg aattcactca ggtttctctt tgagggtcag agaattgctg ataatcatac       360
    tccaaaagaa ctgggaatgg aggaagaaga tgtgattgaa gtttatcagg aacaaacggg       420
    gggtcattca acagtttaga tattcttttt atttttttc ttttcctca atccttttt         480
    attttaaaa atagttcttt tgtaatgtgg tgttcaaaac ggaattgaaa actggcaccc        540
    catctctttg aaacatctgg taatttgaat tctagtgctc attattcatt attgtttgtt       600
    ttcattgtgc tgattttttgg tgatcaagcc tcagtcccct tcatattacc ctctcctttt      660
    taaaaattac gtgtgcacag agaggtcacc tttttcagga cattgcattt tcaggcttgt       720
    ggtgataaat aagatcgacc aatgcaagtg ttcataatga ctttccaatt ggccctgatg       780
    ttctagcatg tgattacttc actcctggac tgtgacttc agtgggagat ggaagttttt         840
    cagagaactg aactgtggaa aaatgacctt tccttaactt gaagctactt ttaaaatttg       900
    agggtctgga ccaaaagaag aggaatatca ggttgaagtc aagatgacag ataaggtgag       960
    agtaatgact aactccaaag atggcttcac tgaagaaaag gcattttaag attttttaaa      1020
    aatcttgtca gaagatccca gaaaagttct aattttcatt agcaattaat aaagctatac     1080
    atgcagaaat gaatacaaca gaacactgct cttttttgatt ttatttgtac tttttggcct    1140
    gggatatggg ttttaaatgg acattgtctg taccagcttc attaaaaataa acaata          1196


    <210> 226
    <211> 1791
    <212> DNA
    <213> Homo sapiens

    <400> 226
    tcagggaggt ggcaggaaag gcttggaaca gctgccggag tgacggagcg gcggccccgc         60
    ccggttcgcg tggaggtcga agcttccagg tagcggcccg cagagcctga cccaggctct       120
    ggacatcctg agcccaagtc cccacactc agtgcagtga tgagtgcgga agtgagagtg         180
    acagggcaga accaggagca atttctgctc ctagccaagt cggccaaggg ggcagcgctg       240
    gccacactca tccatcaggt gctggaggcc cctggtgtct acgtgtttgg agaactgctg        300
    gacatgccca atgttagaga gctgctgag agtgactttg cctctacctt ccggctgctc        360
    acagtgtttg cttatggac atacgctgac tacttagctg aagcccggaa tcttcctcca        420
    ctaacagagg ctcagaagaa taagcttcga cacctctcag ttgtcacct ggctgctaaa        480
    gtaaagtgta tccatatgc agtgttgctg gaggtcttgc cctgcgtaat gtgcggcagc        540
    tggaagacct tgtgattgag gctgtgtatg ctgaacgtgct tcgtgggctcc ctggaccagc     600
    gcaaccagcg gctcgaggtt gactacagca tcgggcggga catccagcgc caggacctca       660
    gtgccattgc ccgaaccctg caggaatggt gtgtgggctg traggtcgtg ctgtcaggca       720
    ttgaggagca ggtgagccgt gccaaccaac acaaggagca gcagctgggc ctgaagcagc        780
    agattgagag tgaggttgcc aacttaaaa aaaccattaa agttacgacg gcagcagcag        840
    ccgcagccac atctcaggac cctgagcaac acctgactga gctgagggaa ccagctcctg        900
    gcaccaacca gcgccascca gcaagaaagc ctcaaaggc aaggggctcc gagggagcgc         960
```

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caagatttgg tccaagtcga attgaaagra ctgtcgtttc ctccctgggg atgtggggtc    1020
ccagctgcct gcctgcctct taggagtcct cagagagcct tctgtgcccc tggccagctg    1080
ataatcctag gttcatgacc cttcacctcc cctaacccca aacatagatc acaccttctc    1140
tagggaggag kcaaatgtag gtcatgtttt tgttggtact ttctgttttt tgtgacttca    1200
tgtgttccat tgctccccgc tgccatgctc tctcccttgt ttccttaaga gctcagcatc    1260
tgtccctgtt cattacatgt cattgagtag gtgggtagcc ctgatggggg tcgctctgtc    1320
tggagcataa cccacaggcg tttttctgc cacccatcc ctgcatgcct gatccccagt    1380
tcctatacccc tacccctgac ctattgagca gcctctgaag agccataggg ccccccacctt    1440
tactcacacc ctgagaattc tgggagccag tctgccatgc caggagtcac tggacatgtt    1500
catcctagaa tcctgtcaca ctacagtcat ttcttttcct ctctctggcc cttgggtcct    1560
gggaatgctg ctgcttcaac cccagagcct aagaatggca gccgttttctt aacatgttga    1620
gagatgattc tttcttggcc ctggccatct cgggaagctt gatggcaatc ctggaagggt    1680
ttaatctccc tttgtgagtt tggtgggaaa gggaagggta tatagattgt attaaaaaaa    1740
aaaaggtata tatgcatata tctatatata atatgacgca gaaataaatc t             1791
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<210> 227
<211> 2517
<212> DNA
<213> Homo sapiens

<400> 227
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tgtgggggccc tcaagcgagc tcgactggtc catcctgggg tagcgasgtg gtgtttgtga     120
aaaaggacga tgccatcacc gcatayaaga agtacaacaa ccggtgtctg gacgggcagc     180
cgatgaagtg caaccttcac atgaatggga atgttatcac ctcagaccag cccatcctgc     240
tgcggctgag tgacagccca tcaatgaaaa aggagagcga gctgcctcgc agggtgaact     300
ctgcctcctc ctccaacccc cctgccgaag tggaccctga caccatcctg aaggcactct     360
tcaagtcctc aggggcctct ktgaccacgc agcccacaga wttcaaaatc aagctttgag     420
caggggagtr aggcagccag aagtggggc agaggagggt ggtctgtt cccaaggca     480
aagcttatga ccaatgggcc atcggactgg agacccctga ttgtgggaag ggttgccagg     540
gataaagagc ttcctcactg gatgggaccc gccttttctgt gttgtgtctt gccctgtgct     600
cttctctcta cgttaacgtt tcctgtagta tgtttcttca tctcatcgcc aaggtaggct     660
tgtgttttm agtgtgtgcc tccccgagcc tcagccccaa gctgatttct tatctggaaa     720
tggtacactg aattctctgg gtggcttttct tgtgtgcccca tgggatgcag cgtggggct     780
gtctgaagga ccctgcttt tccagggcc gagggggctgc cttttcctttg tgtgtattaa     840
gctttttcaaa caatggaggg gatggagagc cctggtgtcc tgacggggagc caggtcggcc     900
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aggcctcttg tcctctcccc agtggctcca gcctccacta gtgcaaggg caggatgagg    1020
ctgcaccgct gggaagagtc tatctaagct cttggcttgg agtcccgtgt cgtctccrcc    1080
cagaggaagt tctccagagt tcaccttttcc cttttccttg gtgttgctg aatgcccccac    1140
cccagctctc tttcccttct gggtgtcttt gctgggaggg ggctgtgttg tgagccctcc    1200
cggttctcac ctcgcctggc acttaaccac accctggttt tgtgtagccg ccagctctct    1260
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gacagtggtc aggagtgacc ggaggcatat atccagctgc caccaaggg cactgtttgt    1440
tcccacttat gtgagtgacc ccatccatcc atgaccagag gattattttc ctgccttggc    1500
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ggcgcagaca gttgggacga aacttcagag cccaggcagt cctgaatga ccaggccagt    1620
gttgtcactg agtggtcccc tgctggttgg gagtgaagaa aatccaggct ggcagagctg    1680
gagccagttg gggagcacgg ttctgggagc tctgcaaaat cagtagcaag tgctggaaaa    1740
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aaaccagaga ctcatgtttc caggggtcag tctgtcaggc aggaaggacc caggatttga    1860
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caagtgggtg cagactttctc gttagcagct ggaagacatt cctcccacac ttttccctttc    2040
ctgcccaag agacatcca gaaggcagta ggacctggtt tttcaggtac tgggagccgg    2100
gggctcactg cttgcactgt gcttaggggta gggatggtaa atatcctccc tgcatggctt    2160
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tatcctccct ctcatcccaa agcaggtatc ttctggttgt cacagagttt cattgagtcc      2220
agctgcagcc acgtggccat ctggagctgg tgctataggt gaccatctgg tacattgagg      2280
ggacctgttt gcctcctcca ctctataagc agtcatcttg ggagaccggg aggagaaggt      2340
ggtgggctag tcctgtgtcc tcctccactt cccatgcctc tatgttaccc atctgtgtct      2400
cctgtgcaga aggagaggaa ggggcattaa gagatgaagg gtgattatgt attacttatc      2460
catttctgaa taaacatttg ttattcctaa aaaaaaaaaa aaaaaactcg aggggggg        2517
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<210> 228
<211> 2424
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2366)
<223> n equals a,t,g, or c

<400> 228
ttgtanctaa tcgaggattg attctaatga cagagtcttt caacactttg cacatgatgt       60
atcacgaagc tacagcttgc catgtgactg gagatttagt agaacttctg tcaatatttc      120
ttttcggtttt gaagtctaca cgccctatc ttcagagaaa agatgtgaaa caagcattaa      180
tccagtggca ggagcgaatt gaatttgccc ataaactgtt aactcttctt aattcctata      240
gtcctccaga acttagaaat gcctgtatag atgtcctcaa ggaacttgta cttttgagtc      300
cccatgattt tyttcatact ctggttccct ttctacaaca caaccattgt acttaccatc      360
acagtaatat accaatgtct cttggacctt atttcccttg tcragaaaat atcaagctaa      420
taggagggaa aagcaatatt cggcctccgc gctctgaact caatatgtgc ctcttgccca      480
caatggtgga aaccagtaag ggcaaagatg acgtttatga tcgtatgctg ctagactact      540
tcttttctta tcatcagttc atccatctat tatgccgagt tgcaatcaac tgtgaaaaat      600
ttactgaaac attagttaag ctgagtgtcc tagttgccta tgaaggtttg ccacttcatc      660
ttgcactgtt ccccaaactt tggactgagc tatgccagac tcagtctgct atgtcaaaaa      720
actgcatcaa gcttttgtgt gaagatcctg ttttcgcaga atatattaaa tgtatcctaa      780
tggatgaaag aactttttta aacaacaaca ttgtctacac gttcatgaca catttccttc      840
taaaggttca aagtcaagtg ttttctgaag caaactgtgc caatttgatc agcactctta      900
ttacaaactt gataagccaa tatcagaacc tacagtctga tttctccaac cgagttgaaa      960
tttccaaagc aagtgcttct ttaaatgggg acctgagggc actcgctttg ctcctgtcag     1020
tacacactcc caaacagtta aacccagctc taattccaac tctgcaagag ctttttaagca     1080
aatgcaggac ttgtctgcaa cagagaaact cactccaagg acagaaagcc aaagaaagaa     1140
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agcacactgt agacagctgc atcagtgaca tgaaaacaga aaccagggag gtcctgaccc     1260
caacgagcac ttctgacaat gagaccagag actcctcaat tattgatcca ggaactgagc     1320
aagatcttcc ttccctgaa aatagttctg ttaaagaata ccgaatggaa gttccatctt     1380
cgtttcaga agacatgtca aatatcaggt cacagcatgc agaagaacag tccaacaatg     1440
gtagatatga cgattgtaaa gaatttaaag acctccactg ttccaaggat tctaccctag     1500
ccgaggaaga atctgagttc ccttctactt ctatctctgt agttctgtct gacttagctg     1560
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tcagttgtgg ccattccaga ggactcttta gtcatatgca gcaacatgac attttagata     1680
cctgtgtag gaccattgaa tctacaatcc atgtcgtcac aagggatatc tggcaaagga     1740
aaccaagctg cttcttgaca ttaggtgtag catgtctact tttaagtccc tcacccccaa     1800
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tctctgcttg aatggcaaga tagatttata ggcttaattc ttggtcaggc agaacctccag     1920
atgaaaaaaa cttgcatctt cagtatactt cctaaagggc aatcagataa tggatatgtt     1980
ttatgtaatt aagagttcac tttagtggct ttcatttaat atggctgtct gggaagaaca     2040
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gggttgccta gccctgtaca atgtaattta aacttacagc atttttactg tgtatgatat      2100
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cttattatca aaattaagtt tacttgtata cggaacaacc acaagaaatt tgattctgta      2220
aagaatcctc tttagctgtg gcctggcagt atataaatgg tgctttattt aacagaaatac      2280
ctgtggagga aataaagcac acttgatgta aaaataattg ttttattttt attgacatga      2340
ctgattgatt gctattctgt gcactnaatt aaactgattg tgatgactta aaaaaaaaa      2400
aaaaaaaaaa aaaaaaaaa aaaa                                              2424


<210> 229
<211> 1080
<212> DNA
<213> Homo sapiens

<400> 229
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 taggtgacaa gaaaacaaag atcttattca aaagaggtct tacagcaacc caacgtctca       120
 tcttcccata gtaaagatga cggcgccttg aggtaagcta caggcaacac cacttccgcg       180
 tttctcttgc gccctggtcc aagatggcgg atgaagccac gcgacgtgtt gtgtctgaga       240
 tcccggtgct gaagactaac gccggacccc gagatcgtga gttgtgggtg cagcgactga       300
 aggaggaata tcagtccctt atccggtatg tggagaacaa caagaatgct gacaacgatt       360
 ggttccgact ggagtccaac aaggaaggaa ctcggtggtt tggaaaatgc tggtatatcc       420
 atgacctcct gaaatatgag tttgacatcg agtttgacat tcctatcaca tatcctacta       480
 ctgcccagaa aattgcagtt cctgagctgg atggaaagac agcaaagatg tacaggggtg       540
 gcaaaatatg cctgacggat catttcaaac cttttgtgggc caggaatgtg cccaaatttg       600
 gactagctca tctcatggct ctggggctgg gtccatggct ggcagtggaa atcctgatc       660
 tgattcagaa gggcgtcatc caacacaaag agaaatgcaa ccaatgaaga atcaagccac       720
 tgaggcaggg cagagggacc tttgataggc tagatacta ttttcctgtg catcacactt       780
 aactcatcta actgcttccc cggacaccct ccacctctag ttgttactaa gtagctgcag       840
 taggcattgc tggggaagaa acaaacacac accaaacagt actgctactt agtttctaag       900
 gctgcacagg gaagggaaag actgggcttt ggacaatcta gaggtaattt atatccgccc       960
 ccaggtggag caacatgcga ttctggaggc acggggggtaa ctgaaagtga gtacacatag      1020
 tctttctggt ttctggagat aaacccatcaa taaaagctgc ttcctctggg taaaaaaaag      1080


<210> 230
<211> 1336
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (603)
<223> n equals a,t,g, or c

<400> 230
 ttgcattcac aattactggg aggcaggcag gggcagttgc atgctggggg tggctgcatg        60
 ggctgcgcasc tctcctgggt ttgaaggatg cggtacasct gcttcagctg agcaacgatg       120
 ttatccttga tgtctggggt tgagatctgc aggcggacac tgccactatc aaaggatcgt       180
 gtgaaatcac cagaaaacat ctcgtagatc atccgagcca ctactggaat gacctgaacc       240
 aagatgagtt tccttccaa tggtttccca tctggccatt cttcccaaa gcataagtag       300
 atctcaaacg gtggctgctt ctctatctgt cctttctggt gggcaatgag atcgctaagg       360
 aatgtttcca gacaaaatag cttgaccttc ttttgtctct caatcaggtt gggagcaaca       420
 agtgatgggg cacatggccc agaccagtac accttgcact ggcacagyct gatggcataa       480
 atggcatgac cgctgacctc caggatcagt cctctgtcca tgacgtccag cagcttgcta       540
 gtgaacagct tctgcttctc attggtaata tgctcaggac ctgggaattt gacctgctcc       600
 agnctgacgg gaccaaagag ctcctcctgg tcaggcatgg gacccaggtc cccatagaag       660
 agtcggcagc cctgagggtt gctcacggtc atggtcctgc ccgtactcct tcccacggta       720
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ctgaaacttg atgtccaggt cagtcattgg gagagagctg atcccacagt ctggagagct      780
atagaaggrc tgtataggtg cctgggggwac ttccatctcc agggggttcag ttttgggcca      840
cactgcctcc ggsctgcagt tgcccacact gcaattgccc acactggctg gcgccatggg      900
agaaccattg atgttcagga aggggaaggt gtcctggatg ggaacatggt gctgcgactg      960
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atatatcttc actgggttca tgggcacctc ccttggtgcc atccatacat ccaggttgaa     1140
ttctctgtc ttattgagag cacagcgcag ctgggccctc catttagctg ggtcagggtc     1200
atccacccct tcctgtgtact tccctgtctc tacagcccag gccttaaaaa tggtattttc     1260
ctcttcttgt tgagggctat gccggggtggc atgtttccag ggaatctgga agcgtttaga     1320
gtccctgtgt agccag                                                    1336
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<210> 231
<211> 2043
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (901)
<223> n equals a,t,g, or c

<400> 231

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gacctcagac cccacccaca ctccagatcg agaccctgc ctccccccgg caaatgtcct      120
cccgctgcct tgcagcctgc actttgcaca tgctcacccc cagcacagtc ccactggccc      180
ctcamctccc cttccctgag ctccttccca gcagctcctg gtcactgcct gctgtgcakt      240
cagaggccca gggtccagca gcccggsggg aacgggtgct gcctsttcct ccagttagct      300
ccagytcagg tctgagaccc gtgytgagta aagtctgag camcgaccgt gccctctgcc      360
cagggctggg tcctgagcag ctggtttttcc tgcaggaagg ttggagcaag caaagtcctt      420
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cagtctggcc ctgcccccta ctaaagcctc tgctctcagc acttttcccc aagtccttgt      660
aacttgcttg aaggtgggtt ctggctgcca gccagtccct ggacaaactc tcctgcccct      720
tttaaatttc actcattttg tataaaccca gcaggctggt gtttacttag ccctgtagct      780
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ngcccagctg ggggccgggg atggggggctt ctctctctgg gaggggtgca ggtgccctcc      960
ccaggctggg agggttcctt ccctagctcc ccatctgccc ccgctggtga gagttgggct     1020
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ttttactcac ctaaccctta gaaaatgaat gttagaaggt gcctgccgag gcgggacaga     1140
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gatggggagt tctgtcctgc ccttctgtgt ctgcgtgacc tcaccagcc taggaggggag     1320
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ctcctggact tcaaattcta tatattgaga gagttggaga gtatatcaga gatatttttg     1680
gaaaggagtt ggtctatgca atgtcagttt ggaatcttct tgaaagttta atgtttttat     1740
taggagattt aaagaaaata aaggtctaca atatctttag gttttttttt ttttcctgtt     1800
accgcacaaa ctgaccacat ggcatgtcta tcaggatgga gggtgtccat gttctcctct     1860
gtctttaggg aggtgataag gagatgggscg raggggtgtt tttttctttg actccctcc     1920
tttctaacag aatgttgcca ccactgcttg agtgggctgt gtttgttcct ctgtcccagc     1980
ttctgttgta gaaaataaca ttgttagggg aactcaggct agtgtcagcg tcttggtttg     2040
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ggg   2043

<210> 232
<211> 629
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (624)
<223> n equals a,t,g, or c

<400> 232
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gcgtcgctct agagatcgat gggctagagg agaagctgtc ccagtgtcgg agagacctgg       120
aggccgtgaa ctccagactc cacacgccgg agctgagccc agaggccagg aggtccctgg       180
agaaggagaa aaacagccta atgaacaaag cctccaacta cgagaaggaa ctgaagtttc       240
ttcggcaaga gaaccggaag aacatgctgc tctctgtggc catctttatc ctcctgacgc       300
tcgtctatgc ctactggacc atgtgagcct ggcacttccc cacaaccagc acaggcttcc       360
acttggcccc ttggtcagga tcaagcaggc acttcaagcc tcaataggac caaggtgctg       420
gggtgttccc ctcccaacct agtgttcaag catggcttcc tggcggccca ggccttgcct       480
ccctggcctg ctgggggtt ccgggtctcc agaaggacat ggtgctggtc cctcccttag       540
cccaaggggag aggcaataaa gaacacaaag ctgaaaaaaa aaaaaaaaaa aactcgtagg       600
gggggcccgt acccaatcgc cctntcgtg                                          629
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<210> 233
<211> 540
<212> DNA
<213> Homo sapiens

<400> 233
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taaaaagaag cgggagaatc tgggcgtcgc tctagagatc gatgggctag aggagaagct        60
gtcccagtgt cggagagacc tggaggccgt gaactccaga ctccacagcc gggagctgag       120
cccagaggcc aggaggtccc tggagaagga gaaaaacagc ctaatgaaca aagcctccaa       180
ctacgagaag gaactgaagt ttcttcggca agagaaccgg aagaacatgc tgctctctgt       240
ggccatcttt atcctcctga cgctcgtcta tgcctactgg accatgtgag cctggcactt       300
ccccacaacc agcacaggct tccacttggc ccctggtca ggatcaagca ggcacttcaa       360
gcctcaatag gaccaaggtg ctggggtgtt ccctcccaa cctagtgttc aagcatggct       420
tcctggcggc ccaggccttg cctccctggc ctgctggggg gttccgggtc tccagaagga       480
catggtgctg gtccctcctt tagcccaagg gagaggcawt aaagacacaa agctgggaaat       540
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<210> 234
<211> 448
<212> DNA
<213> Homo sapiens

<400> 234
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aattgtgaaa tattagaata ttgttactat ttgacccaac tcaaaatctc catgggaaaa        60
tacctgtcga tacccacagt attgttgaaa ataatcagat gcagtatcac agctgtgtca       120
gactctagta ccagttgggc aatcaaggca cagctaaaaa ttgaaaacaa agatctggac       180
aacaaaacag ccaaaggtgg gggtcaagaa gctctgacgt gtacctagct gtagaatgct       240
atgcacacgt gccaggtgta gtgtgcatat ccaggaaaaa ctgcagagag ccccagtctt       300
camctctggt tgaccatgag ctctgtgtaa gcaggaagtg aaggctaagg cagatttaag       360
ctctgaaagc attccacaac atacacacaa atcgtgcaaa gcattaagga aatcttgtta       420
ctgctaagtg ttgctgaccc aggaacaa                                          448
```

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<210> 235
<211> 407
<212> DNA
<213> Homo sapiens

<400> 235
 gtatgctgcc ccaaaccaat atgtgtggct gcctttwacc tgacttctcc aacatgtagc       60
 cccaagagga ggcctctaga ctragggagg ggctggtgac ccaggtgtgg tggggctgca      120
 tgaractacc agagagacag acattctgga actcaccctg ggggatccag tggatctgcc      180
 tatggtctgg tccaccccag acctgtgaga tgttcctcat gaggatgcac ttgtgcttct      240
 gcaagtattg ctgcagcttc atagtgactc ccaccagcac cagcaataca gytagctacc      300
 tgtggccttg gatctcagcc agcatggctg ggagagggag carctgggca tgtaccctaa      360
 atgctgttac cagggaagga ctcccagagt gaagacaagt agggact                    407


<210> 236
<211> 830
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (92)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (543)
<223> n equals a,t,g, or c

<400> 236
 gtatttgatt tcaggctgct aaatgggctc atttagcatt cattccttga tgtagacatt       60
 aaaaaaaaaa ctgaatagca ttcttccag gntaactaat aaagcagaca tgctaagcct       120
 ataaatacat cagcactgca gcacacgttt aaggttgcca cggacaagga tcacacaata      180
 gagaacactg tagttcggtc tgctcacaag acccagaaca ttgatcagtt tttgttgttg      240
 gtttattatt tttctgttaa aaaattgtga aaagtttgtt ttagctagat gatattttaa      300
 tagctgcgag tgctttggaa ctataaagat gtcactactt aacacacata ccttatgttt      360
 tgttttgttt tgttttacac tcagtataaa tcaggagaag ttagccaacc atctagcatt      420
 tagaatcctc ttttttattg tcttctaagg atatggatgt tcccataaca gcaacaaac      480
 agcaacaaaa acatttcata aatatccactt gatagactgt aagcacctgc ttaactttgt     540
 gtnccaaata tttagtgtgt atatatatat atatatacac acacacacac atatatattc      600
 aacaaataaa gcaaaatata acatgcattt cacattttgt ctttccctgt tacgatttta      660
 atagcagaac tgtatgacaa gtttaggtga tcctagcata tgttaaattc aaattaatgt      720
 aaaacagatt aacaacaaca aagaaactgt ctatttgagt gaagtcatgc tttctattat      780
 aataacttgg cttcggttat ccatcaaatg cacacttata ctgttatctg                 830


<210> 237
<211> 932
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (256)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (599)
<223> n equals a,t,g, or c

<400> 237
 ccagaagaaa gaccaatcta gaatatggaa ctctaatcac ttctagtatt tcaacttcct        60
 agcagaaatg aacttggccc tagacctagg ggataagcaa tgttctttat gtagccaatg       120
 ctacggaaac aaaagaggtg aaagagaccc tttttttata cttaatgtac atatattgac       180
 tttttgagca agaatgccag aaatagcctt cattctacc ctgcaaaata atccagatct        240
 gctttctaaa atgrantcag tttctaaagt gaaacatgca atatttatgc tctgactgac       300
 tcctgaattg gargaggaag racttctgtt tacagaaaac ygtattgtta tatatgtcag       360
 gctgtgtatt gtgactatca gcattctggt gcaaatgaac ttttctccat catcgactgt       420
 ggaaaattga tacttttaaa gcatattctt ctatgagcac aggtcctcct agtgaaactt       480
 aatttgacaa agggtgtcat atgctttcct aacctgawtt gtattaacat tcacagagcc       540
 tacatttttct cattagggtt rtgatgctca gtatctttcc aagtgccagg cagrgcttnc      600
 ctttttctgat caaacatacc attttttgta tttcacaact atagacagtc acttctgcag      660
 tcccaattta aaaatgcaga actgctttat ccaagaatgc tgaaaaatac tgttctatcc      720
 aggtttccta aactataaaa gcagattttg ctttgtttg ttaatcatag gcatggccga       780
 gcattgtgga ttagcctgag gcttaaaatc agatgcatgt ctggtaagat gaccactgtc      840
 tcactatcaa gagcctgcag agccattttc cagacctgtg attgcccaga acacatagtc       900
 cccacgtttc taatttggag caaatctaaa ag                                    932


<210> 238
<211> 2786
<212> DNA
<213> Homo sapiens

<400> 238
 ttagcagggt gagctgttaa aacagcacac atctctcatc ccctcttcct ttattccccc        60
 ctgggtttca gaaaggaagg atatatgggg accacctccc ccttctttga tcccagcatc       120
 tcagtccccc teccaaccct ccatatggct ctcaatggtg ctcacttgct tggaagcagg       180
 ctccaaatag ggagggggsct gccctctaca gtctctttga ctgtaagaca gggctctgta       240
 tcagtgagac gatgagaaaa gtcccaggct aatggcagaa atttgcactt tgaacatgtg       300
 tgtttttgtg ttgcggaacc tgagattcct tatttattaa caggaagtct gattttttt        360
 ttttggagtc tttgttgcta tattttgtgg ggctgggaga gagagttag attattttga        420
 catgggatcc cttccataac aggtactttg aaggcaagac ataggttga agaagcacaa        480
 ccagcctctg aaatcatagc tctccagtgg cttttaaaga aagctggtcc tcagcactaa        540
 caaaatcact acaatagcct agtgcttttt tggaagcctt tttagggaag aatgttaggt       600
 tcatggtaac tagtatgctc tttgagattt ttacagtgtt gaaacttaag aattttgaga       660
 gggtgaggag ggttgttcag aatctaaatt acagatagat gattgtttct tgtgaatttg       720
 tttcttttcc tttttttttg tccctaccat ttccttacat ttcccttggg gcccatctct       780
 ggctccttgc tttttgtttc ttgctttgct ttatcagttc attccagctc cctgttagtg       840
 aaggacactg ctgttagtga aggaacaaag tctatgagtc ctaaaatttt aagtcaaaga       900
 aaactgctct gtttccccctt tagtaacact tctgaagagg aaaaacttca atagccaaag       960
 ttaataatcc tatataataa ttgctttggc tttcacctaa aattctgggc atcacaattt      1020
 ccttgggata gaggttgtgt tgggggaatag attgcttatt gctgttcact ggagagaaaa     1080
 ggtagtgttt ttgtacaagg tcatacggcc agagccccca aatcctattt tggctcatct      1140
 tcaggtaaag agtaattcct atcctgtgtg cctcagaagc tagaatcgaa ggcttaccct      1200
 attcattgtt tattgtcaga aatgcatgat ggctcttgga aagaatgacg ttttgctgga     1260
 aaaaaaaaaa agaacagttt gtgtttcaca aacatggctt atcaatttt tcaaagaatt      1320
 cttttttccc aaaaagagga gtaacaaaat gtcattttctg aaagaggctt actttatacc     1380
 aactagtgtc agcatttggg atgccaggsa acagagagtg agacacctac aatcaccagt      1440
 ctcaaatgcg ctattgtttc ttttcagagt gttgcagatt tgccatttct ccataatatg     1500
 gggatagaaa atggaataaa gatagaaggg atgtagaata tgctttcctg ccaacatggt     1560
 ttggagtcga ctttgtgtata ttgactagat ttgaaaatac aaggattgatt agatgaatct    1620
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acaaaaaagt tgtcctcctc tcaggtccct tttacacttt ttgactaact agcatctata    1680
ttccacactt agcttttttg tcacacttat cctttgtctc cgtaaatttc atttgcagtg    1740
gttagtcata gattaatttta gccacctaca caaaagcaaa ctgcattttt aaaaatcttt    1800
ctgagatggg agaaaatgta ttctcctttc ctataccgct ctcccaacaa aaaaacaact    1860
agttagttct actaattaga aacttgctgt actttttctt ttctttttagg ggtcaaggac    1920
cctctttata gctaccattt gcctacaata aattattgca gcagtttgca atactaaaat    1980
atttttttata gactttatat ttttccttttt gataaaggga tgctgcatag tagagttggt    2040
gtaattaaac tatctcagcc gtttccctgc tttcccttct gctccatatg cctcattgtc    2100
cttccaggga gctcttttaa tcttaaagtt ctacatttca tgctcttagt caaattctgt    2160
tacctttta ataactcttc ccactgcata tttccatctt gaattggtgg ttctaaattc    2220
tgaaactgta gttgagatac agctatttaa tatttctggg agatgtgcat ccctcttctt    2280
kgtggttgcc caaggttgtt ttgcgtaact gagactccct gatatgcttc agagaattta    2340
ggcaaacact ggccatggcc gtgggagtac tgggagtaaa ataaaaatat cgaggtatag    2400
actagcatcc acatagagca cttgaacctc ctttgtacct gtttggggaa aaagtataat    2460
gagtgtacta ccaatctaac taagattatt atagtctggt tgtttgaaat accatttttt    2520
tctccttttg tgttttttccc actttccaat gtactcaaga aaattgaaca aatgtaatgg    2580
atcaatttaa aatattttat ttcttaaaag cctttttttgc ctgttgtaat gtgcaggacc    2640
cttctccttt catgggagag acaggtagtt acctgaatat aggttgaaaa ggttatgtaa    2700
aaagaaatta taataaaagg gatactttgc ttttcaaatc tttgtttttct cttattctag    2760
gtaaggcata ttaaaaataa atatgt                                           2786


<210> 239
<211> 458
<212> DNA
<213> Homo sapiens

<400> 239
 gggtgcagga attcggcacg agagaatgtt tgatttttctt tcctattttta aggatcttct     60
 ctcttgttga tgttgaaaac ttaccttagt gaagatgtgt ttcaacatgc tgttgtcctt    120
 tacctgcata atcacagcta tgcatctatt caaagtgatg atctgtggga tagtttttaat    180
 gaggtcacaa accaaacact agatgtaaag agaatgatga aaacctggac cctgcagaaa    240
 ggatttcctt tagtgactgt tcaaaagaaa ggaaaggaac tttttataca acaagagaga    300
 ttctttttaa atatgaagcc tgaaattcag ccttcagata caaggtacat gccctctttc    360
 ttttcatgcc atctcttttg cactctcagg tggaaatatt tttaagtgtt ttataatcat    420
 aagttctcgt gaaacctaac aagattatcc cttcctaa                            458


<210> 240
<211> 591
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (495)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (516)
<223> n equals a,t,g, or c

<400> 240
 aggatgaaga ggaaattatc tcttggattg ctctccagga aatccttctc tatactttaa     60
 aagctcttgt tcttttctag gartccaatg tgctgattgc tgctaacagt cagggtacaa    120
 ttaaggtgct agaattggta tgaagggtta actcaagtca aattgtactt gatcctgctg    180
 aaatacatct gcagctgaca atgagagarg aaacagaaaa tgtcatgtga tgtctctccc    240
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```
      caaagtcatc atgggttttg gatttgtttt gaatattttt tctttttttc ttktccctcc    300
      tttatgagcc tttgggacat tgggaatacc cagccaactc tccaccatca atgtaactcc    360
      atgacattg ctgctcttgg tggtgttatc taatttttgt gatagggaaa caaattcttt     420
      tgaataaaaa taaataacwa aacaataaaa gtttattgag ccacagttga gcttggaaag    480
      tttttgtcaa atgcngcaag agataactct ttttangaag tagcatatgt gaactataat    540
      gtaacagtga ataatttgta aagttcgtat ttcccaacct ctttgggaat t             591
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<210> 241
<211> 2449
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1375)
<223> n equals a,t,g, or c

<400> 241

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      ggcacgagcc tttctgaaga ttaaaaaaca aataaaaagt tgagaagaaa gagcacgaag     60
      agtagaagg aacaatggtg tactcgccag caatggcaat acgggttatt aaaaagaagg     120
      gtgggggcgg ggaaccctgg ccgactcagg acgccacggg aggaagccac gcaaaatagc    180
      aaaccgggat cctagagggg cggggcccac ctcagcgcgc aggcgcaacc aggcccaggt    240
      ggccgccgcg gaagcgaacc acctatacgc gccgcgccgc ttgggtctcc tgcgcatgcg    300
      cagacasctg cgctggaggc ttcatctttg ccgccgctgc cgtcgccttc ctgggattgg    360
      agtctcgagc tttcttcgtt cgttcgycgg cgggttcgcg cccttctcgc gcctcggggc    420
      tgcgaggctg gggaaggggt tggagggggc tgttgatcgc cgcgtttaag ttgcgctcgg    480
      ggcggccatg tcggccggcg aggtcgagcg cctagtgtcg gagctgagcg gcgggaccgg    540
      agggatgag gaggaagagt ggctctatgg cgatgaaaat gaagttgaaa ggcagaagaa     600
      agaaaatgcc agtgctaatc ctccatctgg aattgaagat gaaactgctg aaaatggtgt    660
      accaaaaccg aaagtgactg agaccgaaga tgatagtgat agtgacagcg atgatgatga    720
      agatgatgtt catgtcacta taggagacat taaaacgggga gcaccacagt atgggagtta    780
      tggtacagca cctgtaaatc ttaacatcaa gacaggggga agagtttatg gaactacagg    840
      gacaaaagtc aaaggagtag accttgatgc acctggaagc attaatggag ttccactctt    900
      agagtgtagat ttgttattctt ttgaagataa accatggcgt aaacctggtg ctgatctttc    960
      tgattatttt aattatggt ttaatgaaga tacctggaag ttactgtga aaaaacaaaa    1020
      gaggatacga atgggacttg aagttatacc agtaacctct actacaaata aaatttacggt   1080
      acagcaggga agaactggaa actcagagaa agaaactgcc cttccatctca caaaagctga   1140
      gtttacttct cctccttctt tgttcaagac ccttgttcca ccgagcagaa acagcacttc   1200
      ttctcagtct cagacaagta ctgcctccag aaaaagccatt tcaagcgttg gggaagtggg   1260
      caggwtcgat atgggagggc cgawtcacct aatcaagga gttacctgg ggcaattgat    1320
      gttatcggtc agactatwac yatcagccga gtagaaggca ggcgacgggc aaatnagaac   1380
      agcaacatac aggtccttct tgaaagatct gctactgaag tagacaacaa ttttagcaaa   1440
      ccacctccgt ttttccctcc aggagctcct cccactcacc ttccacctcc tccatttctt   1500
      ccacctcctc cgactgtcag cactgctcca cctctgatc caccacgggg tattccaata    1560
      actgtaccac ctccaggtt tcctcctcca ccaggcgctc cacctccatc tcttatacca   1620
      acaatagaa gtggacattc ctctggttat gatagtsgtt ctgcacgtgc atttccatat   1680
      ggcaatgttg ccttttccca tcttcctggt tctgctcctt cgtggcctag tcttgtggac   1740
      accagcaagc agtgggacta ttatgccaga agagagaaag accgagatag agagagagac   1800
      agagacagag agcggagaccg tgatcgggac agagaaagag aacgcaccag agagagagag   1860
      aggagcgtg atcacagtcc tacaccaagt gttttcaaca ccgatgaaga acgatacaga   1920
      tacagggaat atggacagaa aggttatgag cctccagag caagtcgaga aaaagaagaa   1980
      cgacataga aaagcagcaca cagggagaaa gaggaaacca gacataagtc ttctcgaagt   2040
      aatagtagac gtcgccatga aagtgaagaa gagaagtagtc acaggagaca caaacacaaa   2100
      aaatctaaaa gaagcaaaga aggaaaagaa gcgggcagtg agcctgcccc tgaacaggag   2160
      agcaccgaag ctacacctga agaataggca tggttttggc cttttgtgta tattagtacc   2220
      agaagtagat actataaatc ttgttatttt tctggataat gtttaagaaa tttaccttaa   2280
      atcttgttct gtttgttagt atgaaaagtt aacttttttt ccaaaataaa agagtgaatt   2340
```

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   tttcatgtta agttaaaaat ctttgtcttg tactatttca aaaataaaaa gacagcaatg    2400
   actttatatc caaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggcggcc               2449


<210> 242
<211> 1286
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (555)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1245)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1269)
<223> n equals a,t,g, or c

<400> 242
   tctttttaag gtacagcagg gaagaactgg aaactcagag aaagaaactg ccccttccatc     60
   tacaaaagct gagtttactt ctcctccttc tttgttcaag actgggcttc caccgagcag    120
   gagattacct ggggcaattg atgttatcgg tcagactata actatcagcc gagtagaagg    180
   caggcgacgg gcaaatgaga acagcaacat acaggtcctt tctgaaagat ctgctactga    240
   agtagacaac aattttagca aaccacctcc gtttttccct ccaggagctc ctcccactca    300
   ccttccacct cctccatttc ttccacctcc tccgactgtc agcactgctc cacctctgat    360
   tccaccaccg ggttttcctc ctccaccagg cgctccacct ccatctctta taccaacaat    420
   agaaagtgga cattcctctg gttatgatag tsgttctgca cgtgcatttc catatggcaa    480
   tgcgatgaag aacgatacag atacagggaa tatgcagaaa gaggttatga gcgtcacaga    540
   gcaagtcgag aaaangaaga acgacataga gaaagacgac acaggggaga agaggaaacc    600
   agacataagt cttctcgaag taatagtaga cgtcgccatg aaagtgaaga aggagatagt    660
   cacaggagac acaaacacaa aaaatctaaa agaagcaaag aaggaaaaga agcgggcagt    720
   gagcctgccc ctgaacagga gagcaccgaa gctacacctg cagaataggc atggtttttgg    780
   ccttttgtgt atattagtac cagaagtaga tactataaat cttgttattt ttctggataa    840
   tgtttaagaa atttacctta aatcttgttc tgtttgttag tatgaaaagt taactttttt    900
   tccaaaataa aagagtgaat ttttcatgtt aagttaaaaa tctttgtctt gtactatttc    960
   aaaaataaaa agacagcaat gactttatat ccaagaaagg aatgtgaatg agtcacttaa   1020
   cagggaatct aaagagctgt gttagctgtg tacatacaca gattatctga gaaaagtca   1080
   agggttccac ttgggccaca gtttttttgt taatcaaaca ccactctctt aagrggctgc   1140
   atcacaaarg gacaaccaarg ggccctctt arggctttga ggattaaaac tagtctttat   1200
   ccattactgc tgtggacact cttggcttrg tatwtttagg ggggntcctt acctttttttt   1260
   ggttttccnc acctttttgg ttgggc                                        1286


<210> 243
<211> 734
<212> DNA
<213> Homo sapiens

<400> 243
   atggcagcgc agaaggacca gcagaaagat gccgaggcgg aagggctgag cggcacgacc     60
   ctgctgccga agtgattcc ctccggtgca ggccgggagt ggctggagcg gcgccgcgcg    120
   accatccggc cctggagcac cttcgtggac cagcagcgct tctcacggcc ccgcaacctg    180
```

```
ggagagctgt gccagcgcct cgtacgcaac gtggagtact accagagcaa ctatgtgttc      240
gtgttcctgg gcctcatcct gtactgtgtg gtgacgtccc ctatgttgct ggtggctctg      300
gctgtctttt tcggcgcctg ttaacattct ctatctgcgc accttggagt ccaagcttgt      360
cctctttggc cgaaaggtga gcccagcgca tcatatgctc tggctggagg catctccttc      420
cccttcttct ggctggctgg tgcgggctcg gccgtctcct ggctgctggg agccaccctg      480
gtggtcatcg gctcccacgc tgccttccac cagattgagg ctgtggacgg ggaggagctg      540
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acccctgccc atgcctgtcc tgcacggtct gctgctcggg cccacagcgc cgtcccatca      660
caagcccggg gagggatccc gcctttgaaa ataaagctgt tatgggtgtc attcaaaaaa      720
aaaaaaaaaa aaaa                                                        734
```

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<210> 244
<211> 809
<212> DNA
<213> Homo sapiens
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<400> 244
cggggtcttc agggtaccgg gctggttaca gcagctctat ccctcacgac gcaracatgg       60
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tgccgaagct gattccctcc ggtgcaggcc gggagtggct ggagcggcgc cgcgcgacca      180
tccggccctg gagcaccttc gtggaccagc agcgcttctc acggccccgc aacctgggag      240
agctgtgcca gcgcctcgta cgcaacgtgg agtactacca gagcaactat gtgttcgtgt      300
tcctgggcct catcctgtac tgtgtggtga cgtccccta t gttgctggtg gctctggctg      360
tctttttcgg cgcctgttac attctctatc tgcgcacctt ggagtccaag cttgtgctct      420
ttggccgaga ggtgagccca gcgcatcagt atgctctggc tggaggcatc tccttccct      480
tcttctggct ggctggtgcg ggctcggccg tcttctgggt gctgggagcc accctggtgg      540
tcatcggctc ccacgctgcc ttccaccaga ttgaggctgt ggacggggag gagctgcaga      600
tggaacccgt gtgaggtgtc ttctgggacc tgccggcctc ccgggccagc tgccccaccc      660
ctgcccatgc ctgtcctgca cggtctgctg ctcgggccc acagcgccgt cccatcacaa      720
gcccggggag ggatcccgcc tttgaaaata aagctgttat gggtgtcatt caggaaaaaa      780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                                        809
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<210> 245
<211> 2201
<212> DNA
<213> Homo sapiens
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<400> 245
tcgacccacg cgtccggcaa catggcggct gccgtggtgc agcgcccggg ctgagcgaca       60
gcaagtgcag cgggctccta ccccgggtga ggggtggcct ccgcgtggga tcgtgccctc      120
ttcagcccgc tcctgtcccc gacatcacgt gtattccgca cgtcccctcc gcgctgtgtg      180
tctactgaga cggggaggcg tgacaggggc cgggtccctt ctcagtggtg ctctgtgctt      240
cagggcaagc tcccgtctc cgggcgcact tccctcgcct gtgttcggtc catcctcctt      300
tctccagcct cctccctcg caggcggatg amccggacga cgggccagtg cctggcaccc      360
cggggttgca arggtccamg gggaacccga agtccgagga gcccgargtc ccgaaccagg      420
arggggctgca gcgcatcamc ggcctgtctc ccggccgttc ggctctcata gtggcggtgc      480
tgtgctacat caatcctcctg aactacatgg accgcttcac cgtggctggc gtccttcccg      540
acatcgagca gttcttcaac atcggggaca gtagctctgg gctcatccag accgtgttca      600
tctccagtta catggtcgttg gcacctgtgt ttggctacct gggtgacagg tacaatcgga      660
agtatctcat gtgcggggc attgccttct ggtcctggt gacactgggg tcatccttca      720
tccccggaga gcatttctgg ctgctcctcc tgaccccggg cctggtgggg gtcgggggagg      780
ccagttattc caccatcgcg cccactctca ttgccgacct ctttgtggcc gaccagcgga      840
ccgatgctc agcatcttct actttgccat tccggtgggc agtggtctgg gctacattgc      900
aggctccaaa gtgaaggata tggctggaga ctggctggtg gctctgaagg tgacaccgggg      960
tctaggagtg gtggccgttc tgctgctgtt cctggtagtg gggagcgcgc caagggggagc     1020
cgtggagcgc cactcagatt tgccacccct gaacccacc tcgtggtggg cagatctgag     1080
```

```
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tggggagacc ccaccctgcc ttcccggaga ctcctgctct tcctctgaca gtctcatctt      1260
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tattttatc ttcattggag agaccctcct gtccatgaac tgggccatcg tggccgacat       1500
tctgctgtac gtggtgatcc ctacccgacg ctccaccgcc gaggccttcc agatcgtgct      1560
gtcccactg ctgggtgatg ctgggagccc ctacctcatt ggcctgatct ctgaccgcct       1620
gcgccggaac tggccccct ccttcttgtc cgagttccgg gctctgcagt tctcgctcat       1680
gctctgcgcg tttgttgggg cactgggcgg cgcactttc tgggcaccgc catcttcatt       1740
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acagacgacc ggattgtggt gcccagccgg ggcgcgtcca cccgcgtgcc cgtggccagt      1860
gtgtcatct gagargctgc cgctcaccta tgccacagct ggccctgggc                  1920
ccacccaacg aagggcctgg gcctaacccc ttgcgctggc ccagcttcca gagggaccct      1980
gggccgtgtg ccagctccca gacactacmt gggtagctca ggggaggagg tgggggtcca      2040
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aaaatttgta gccagacccc aggtgcctgc tctcgtcttt ctctgggtgg cctctgatct      2160
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```

<210> 246
<211> 1661
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1200)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1536)
<223> n equals a,t,g, or c

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<400> 246
gtccttcccg acatcgagca gttcttcaac atcggggaca gtagctctgg gctcatccag       60
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tacaatcgga agtatctcat gtgcgggggc attgccttct ggtccctggt gacactgggg       180
tcatscttca tccccggaga gcatttctgg ctgctccctc tgacccgggg cctggtgggg       240
gtcgggggagg ccagttattc cáccatcgcg cccactctca ttgccgacct ctttgtggcc      300
gaccagcgga scggatgctc agcatcttct actttgccat tccggtgggc agtggtctgg       360
gctacattgc aggctccaaa gtgaaggata tggctgagca ctggcactgg gctctgaggg      420
tgacaccggg tctaggagtg gtggccgttc tgctgctgtt cctggtagtg cgggagccgc      480
caagggagc cgtggagcgc cactcagatt tgccacccct gaacccacc tcgtggtggg        540
cagatytgag ggctctggca agaaatccta gtttcgtcct gtcttcgctc ggcttcactg      600
ctgtggcctt tgtcacgggc tccctggctc tgtgggctcc ggcattcctg ctgcgttccc      660
gcgtggtcct tggggagacc ccaccctgcc ttcccggaga ctcctgctct tcctctgaca      720
gtctcatctt tggactcatc acctgcctga ccgagtcct cgggagtcct ctggtgtggg       780
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tggccactta tattttatc ttcattggag agaccctcct gtccatgaac tgggccatcg       960
tggccgacat tctgctgtac gtggtgatcc ctacccgacg ctccaccgcc gaggccttcc     1020
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ctgaccgcct gcgccggaac tggccccct ccttcttgtc cgagttccgg gctctgcagt     1140
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catcttcatt gaggccgacc gccggcgggc acagctgcac gtgcagggcc tgctgcacga     1260
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agcagggtcc acagacgacc ggattgtggt gccccagcgg ggccgctcca cccgcgtgcc    1320
cgtggccagt gtgctcatct gagaggctgc cgctcaccta cctgcacatc tgccacagct    1380
kgccctgggc ccaccccacg aagggcctgg gcctaacccc ttggcctggc ccagcttcca    1440
gagggaccct gggccgtgtg ccagctccca gacactacmt gggtagctca ggggaggagg    1500
tggggtgtcca ggaggggggat ccctctccac aggggncacc ccaagggctc ggtgctattt    1560
gtaacggaat aaaatttgta gccagacccc aggtgcctgc tctcgtcttt ctctgggtgg    1620
cctctgatct tgcaccccgt cttcacccca gggctcctga a                      1661
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<210> 247
<211> 1146
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (214)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (268)
<223> n equals a,t,g, or c

<400> 247
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ngacagaaaa gcagaagatg agactctgtt cattcacttt tcctaggccc atcctgtggt      60
catctttccc cctcccatca tacctcctcc ttcctggagc ctctgccggc ttggctgtaa     120
tggtggcact tacctggata tttcagtggg aggatgaaag gcgagactca ccctacgcgg     180
tgggacagat gggggagagga aaaaggcaga gatngccagg agaggggtgc aggacaaacc     240
agagaggttg ggtcagggga aaagtgtngg gagaaagtgg ggtgcaggcc ctgcaggccg     300
gtttagccag cagctgcggc ctccccgggc ccttggcatc caacttcgca gacagggtac     360
cagcctcctg gtgtgtatca taggatttgt tcacatagtg ttatgcatga tcttcgtaag     420
gttaagaagc cgtggtggtg caccatgaca tccaacccgt atatataaag ataaatatat     480
atatatatgt atgtaaatta tagcactgag ggccctgctg ccctgctgga ccaagcaaaa     540
ctaagccttt tggtttgggt attatgtttc gttttgttat ttgtttgttt ttgtggcttg     600
tcttatgtcg tgatagcaca agtgccagtc ggattgctct gtattacaga atagtgtttt     660
taattcatca atgttctagt taatgtctac ctcagcacct cctcttagcc taattttagg     720
aggttgccca attttgtttc ttcaattta ctggttactt ttttgtacaa atcaatctct     780
ttctctcttt ctctcctccc cacctctcac ccttgccctc tccatctccc tctcccgccc     840
tcccctcctc cctctggctc ccgtctcat ttctgtccac tccattctct ctccctctct     900
cctgcctcct gctgcccct cccagcccca cttcccgag ttgtgcttgc cgctccttat     960
ctgttctagt tccgaagcag tttcactcga agttgtgcag tcctggttgc agctttccgc    1020
atctgccttc gtttcgtgta gattgacgcg tttctttgta atttcagtgt ttctgacaag    1080
atttaaaaaa aaaaaaggaa aaaaaaaaa aaaaaaaac tcgagggggg gcccggtacc    1140
caattg                                                             1146
```

<210> 248
<211> 1350
<212> DNA
<213> Homo sapiens

<220>

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<221> SITE
<222> (334)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1346)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1349)
<223> n equals a,t,g, or c

<400> 248
aaccccacggc tgctgcggca gggcgtggag ggcagagggc cgcggaggcg cagttgcaaa         60
catggctcag agcagagacg gcggaaaccc gttcgccgag cccagcgagc ttgacaaccc        120
ctttcagcca ccaccagcct atgagcctcc agccctgcc ccattgcctc cacccctcagc        180
tccctccttg cagccctcga gaaagctcag ccccacagaa cctaagaact atggctcata        240
cagcactcag gcctcagctg cagcagccac agctgagctg ctgaagaaac aggaggagct        300
caaccggaag gcagaggagt tggaccgaag gagncgagag ctgcagcatg ctgccctggg        360
rggcacagct actcgacaga acaattggcc ccctctacct tcttttgtc cagttcagcc        420
ctgcttttc caggacatct ccatggagat cccccaagaa tttcagaaga ctgtatccac        480
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gagtgacagt tcattcaatt tcttcgtttt cttcttcatt ttcttcgtcc aggatgtgct        720
ctttgtcctc caggccattg gtatcccagg ttggggattc agtggctgga tctctgctct        780
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acaggtgcca gctttcagaa gggccagcaa gaatttgctg ctggtgtctt ctccaaccct        960
gcggtgcgaa ccgcarcttg ccaatgcagc cgctggggct gctgaaaatg ccttccgggc       1020
cccgtgaccc ctgactggga tgcctggcc ctgctacttg agggagctga cttagctccc       1080
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agtcccccca tcaggccaca ctgctgccac ctctcacacg ccccaaccca gcttccctct       1260
gctgtgccac ggctgttgct tcggttattt aaataaaaag aaagtggaac tggaaaaaaa       1320
aaaaaaaaa aaaaaaaag gggggnccnc                                        1350


<210> 249
<211> 2503
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2193)
<223> n equals a,t,g, or c

<400> 249
ggcacgagcg aaggcaaggg ggcaccagct caggactgca tctgcctgcc atttcccttc         60
cactcctcct ttctggagtc tgacattaga aagccagcga gaaggaagat tcaaacaacc        120
aacctgatt tcctgcttct cctttcatg agtgttcctg tggtctctgc acctcctttc        180
tgtccccgg cagagggcag tagagatggc cggcccaagg cctcrgtggc gcgaccagct        240
gctgttcatg agcatcatag tcctcgtgat tgtggtcatc tgcctgatgt tatacgctct        300
tctctcggag gctggcaacc ccagcaccct acagtgtcac cagttccctg agctctggaagc        420
```

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gctctgggca ggcccagsc cttactcatc ctcttgcttta tagccatggc tgtgttcctt      720
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tgaagccaga cagggcagag gcgtccgctg acaaatcact cccatgatga gaccctggag    1440
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agcctcaaga gccaggagag ggcacagtac atacagaggg agtcaaatgg gatctcattt   2160
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ctggcctgag gtgaatctgc caggcccaag aaggcacaaa ggtaggagca cagagagccc   2280
cattcccaca ggcggkcggc ccagcagcac cagtggaagc tcctgtctg tccagctgct    2340
ctcggcagac agttcagtgc acagtttatg ccctagctga aaaagatctc ccggacgtat   2400
ttcagcacat cctcttcctc ctcctcctca gggctcctgc tacaggcaga gctggaaccc   2460
cccggcctct gggaagggct gaggcctgga gycagtgcct gtc                      2503
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<210> 250
<211> 1529
<212> DNA
<213> Homo sapiens

<400> 250

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tcccagaggc cggggggttc cagctctgcc tgtagcagag ccctgaggag gaggaggaag     60
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actgtctgcc gagagcagct ggaggacagc tgagcttcca ctggtgctgc tgggccgmcc    180
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cacctcaggc cagaagcccc tggcacactcc gggccttggg gtgccgttct gagtgtgcgg    300
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aatratgtca tgtggtggtc caacttactg gaaccaaaga gacagtactt tgcaaagaaa    480
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cagccagcct agaaagcaaa cgagctgccc acagttctct ccctgtctg ggaggttgag     660
gccacagtgt atagactggt aagccagaca ggctcctcc cgcaagctgc taccttgctt    720
tcacctgtac cttggtcccc gggcagctag ctataaagca agagggacag gagcccagaa    780
gagacactga ggacaagaga tcacaccaga gtacatgtct ctgcctctgt tttcagtgtg    840
gctttggaca ggaatatatg aataaatcac tgccatacag gttttccaat acacaagtgc    900
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tagaaaatac acacaattcc ccaatgcgta agttgtgcta atgtctttcc aagttctggg      960
ttgggaagtg gagggtggca gcgtttgttt gtgcgcaacc gtccagtcct gttcacagcg     1020
aggatttgga gtcctccagg gtctcatcat gggagtgatt tgtcagcgga cgcctctgcc     1080
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gtgtcctgtc tttgttgagt cactcagaga tcactcctgg acctctgggg ttggagttcc     1200
agtgatggct tatggcggcc cactcactat ggtgggctga gtggaagtc cttaaccatg     1260
tccccagaga cactgaggtg ctcgctcttt taatgtcctc gtttgttgcc gtaagttctt     1320
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tcactccctc cccacccttc tgaagctaga ggaagatttg ctcagatcca ttaattaaag     1440
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<210> 251
<211> 1537
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1516)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1532)
<223> n equals a,t,g, or c

<400> 251

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agcaatggct aagccccagg tggttgtagc tcctgtatta atgtctaagc tgtctgtgaa     180
tgcccctgaa ttttaccctt caggttattc ttccagttac acagaatcct atgaggatgg     240
ttgtgaggat tatcctactc tatcagaata tgttcaggat tttttgaatc atcttacaga     300
gcagcctggc agttttgaaa ctgaaattga acagtttgca gagaccctga atggttgtgt     360
tacaacagat gatgctttgc aagaacttgt ggaactcatc tatcaacagg ccacatctat     420
cccaaatttc tcttatatgg gagctcgcct gtgtaattac ctgtcccatc atctgacaat     480
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aagagcagat attcttcagg ttggtcttcg aggaattgctg aatgccctgt tttctaatcc     720
tatggatgac aatttaattt gtgcagtaaa attgttaaag ttgacaggat cagttttgga     780
agatgcttgg aaggaaaaag gaaagatgga tatggaagaa attattcaga gaattgaaaa     840
cgttgtcta gatgcaaact gcagtagaga tgtaaaacag atgtctcttga agcttgtaga     900
actccggtca agtaactggg gcagagtcca tgcaacttca acatatagag aagcaacacc     960
agaaaatgat cctaactact ttatgaatga accaacattt tatacatctg atggtgttcc     1020
tttcactgca gctgatccag attaccaaga gaaataccaa gaattacttg aaagagagga    1080
ctttttttcca gattatgaag aaaaatggaac agatttatcc ggggctggtg atccatactt    1140
ggatgatatt gatgatgaga tggacccaga gatagaagaa gcttatgaaa agttttgttt    1200
ggaatcagag cgtaagcgaa aacagtaaag ttaaatttca gcatatcagt tttataaagc    1260
agtttaggta tggtgattta gcagaacaca agagagcaag aaaatgtgtc acatctatac    1320
caaattragg atgttgagtt atgttactaa tgtgtcaac tttaattttg tttaacacta    1380
tctgccaaaa taaactttat tccctataac ttaaaatgtg tatatatata taatagttta    1440
ttatgtacag ttaattctac tgtttttggct gcaataaaat cgattttgaa ataaawraaa    1500
aaaaaaaaaa aaggggnggcc gctctagagg anccaag                             1537
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<210> 252

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<211> 506
<212> DNA
<213> Homo sapiens

<400> 252
tgcaggattt ggccaggacc csccgcggtg gcggttgcta tcgcttcgca gaacctactc      60
aggcagccag ctgagaagag ttgagggaaa gtgctgctgc tgggtctgca gacgcgatgg     120
ataacgtgca gccgaaaata aaacatcgcc ccttctgctt cagtgtgaaa ggccacgtga     180
agatgctgcg gctggatatt atcaactcac tggtaacaac agtattcatg ctcatcgtat     240
ctgtgttggc actgatacca gaaaccacaa cattgacagt tggtggaggg gtgtttgcac     300
ttgtgacagc agtatgctgt cttgccgacg gggccttat ttaccggaag cttctgttca     360
atcccagcgg tccttaccag aaaaagcctg tgcatgaaaa aaaagaagtt ttgtaatttt     420
atattacttt ttagtttgat actaagtatt aaacatattt ctgkattatt ccaaaaaaa      480
aaaaaaaaaa aaaaaaaatt tggtgg                                          506


<210> 253
<211> 1348
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> n equals a,t,g, or c

<400> 253
gtctttcttt tnctgttttg agttggtgag tgagtgaata gggtaacatg ggccttcagg      60
atgacccctt ggaactgtgc cgagttcctt aaatctcagc tgggatcctg gacctgggag     120
gccctgtga gggccagctc tggaaaaacc tgggagttga tgccggaggy tgggaagaac      180
tctgctcag ggcaggtgc cctggaacac tggtagttct ggggctggga gggagagggg     240
ctccggcttt ctctgaaatg aacactgctc ttcagcagtt caagtacttg ttctcaaaac     300
attttctaat tgattggtag gttttcataa gcattgtttc tttaaggcat ggaaaggaa     360
gaatgctcaa gcaagtcatg tttgtttttca gtgggatggg gcagctgcaa cactgctggg     420
ggcttccct tgcatgtggc accttgtgc agggccacca ggcagactct tcccaccttc     480
tcccactgaa gcaccaaggg gcttgaaccg taattggct aatcagaggc atttttttg     540
tcctagtatc tttcacactt gtccaaccgt cttattttt taaaagttct gttgcttgta     600
ttaacacgaa actagagaga aatagtttct gaagccagtt tattgtgaag atccccaagg     660
ggaggtcgg tagaaaaaa tagtaagctg gtttagaaac tgacgagggc aaacagccag     720
gacgcattgg agaggaattt gccaaagatc taccctgaga taacgcctgt ccagtgtctt     780
caccacgtga ataaccagcg ctccaaagtg tttttctgct ttgaaaaaaa aaattccaca     840
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aactgtcacg tgtgctagaa ggttcgatgc catgtgatac catgtgatac tcatctccat     960
tttgtttcct tgattgcatt tttgttcttt tagcagatct gtccctgtgg gtggtgtcta    1020
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ttctgtgaaa ctgtatattt tgtaaataaa tatattgcta ctttgagawr aaaaaaaaaa    1320
aaaaactcga gggggggcccg gtacccaa                                      1348


<210> 254
<211> 1766
<212> DNA
<213> Homo sapiens

<400> 254
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caccttctc ccaccctcgc tcgcgtasca tggcggagcg tcggcggcca ctcagtccca         180
ttccatctcc tcgtcgtcct tcggagccga gccgtccgcg cccggcggcg gcgggagccc         240
aggagcctgc cccgccctgg ggacgaagag ctgcagctcc tcctgtgcgg tgcacgatct         300
gattttctgg agagatgtga agaagactga gtttgtcttt ggcaccacgc tgatcatgct         360
gctttccctg gcagctttca gtgtcatcag tgtggtttct tacctcatcc tggctcttct         420
ctctgtcacc atcagcttca ggatctacaa gtccgtcatc caagctgtac agaagtcaga         480
agaaggccat ccattcaaag cctacctgga cgtagacatt actctgtcct cagaagcttt         540
ccataattac gatgatgctg ccatggtgca catcaacagg gccctgaaac tcattattcg         600
tctctttctg gtagaagatc tggttgactc cttgaagctg gctgtcttca tgtggctgat         660
gacctatgtt ggtgctgttt ttaacggaat caccccttcta attcttgctg aactgctcat         720
tttcagtgtc ccgattgtct atgagaagta caagacccag attgatcact atgttggcat         780
cgcccgagat cagaccaagt caattgttga aaagatccaa gcaaaactcc ctggaatcgc         840
caaaaaaaag gcagaataag tacatggaaa ccagaaatgc aacagttact aaaacaccat         900
ttaatagtta taacgtcgtt acttgtacta tgaaggaaaa tactcagtgt cagcttgagc         960
ctgcattcca agcttttttt ttaatttggt gtttctccc atcctttccc tttaaccctc        1020
agtatcaagc acaaaaattg atggactgat aaaagaacta tcttagaact cagaagaaga        1080
aagaatcaaa ttcataggat aagtcaatac cttaatggtg gtagagcctt tacctgtagc        1140
ttgaaagggg aaagattgga ggtaagagag aaaatgaaag aacacctctg ggtccttctg        1200
tccagttttc agcactagtc ttactcagct atccattata gttttgccct taagaagtca        1260
tgattaactt atgaaaaaat tatttgggga caggagtgtg ataccttcct tggttttttt        1320
ttgcagccct caaatcctat cttcctgccc cacaatgtga gcagctaccc ctgatactcc        1380
tttcctttaa tgattttaact atcaacttga taaataactt ataggtgata gtgataattc        1440
ctgattccaa gaatgccatc tgataaaaaa gaatagaaat ggaaagtggg actgagaggg        1500
agtcagcagg catgctgcgg tggcggtcac tccctctgcc actatcccca gggaaggaaa        1560
rgctccgcca tttgggaaag tggtttctac gtcactggac accggttctg agcattagtt        1620
tgagaactcg ttcccgaatg tgctttcctc cctctccct gcccacctca agtttaataa        1680
ataaggttgt acttttctta ctataaaata aaaaaaaaaa aactcgaggg gggcccggta        1740
cccaaatcgc cggatatgat cgtaaa                                           1766
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<210> 255
<211> 2664
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2623)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2640)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2652)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2662)
<223> n equals a,t,g, or c

<400> 255

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agtgtcctcg gagcaggcgg agtaaaggga cttgagcgag ccagttgccg gattattcta        60
tttcccctcc ctctctcccg ccccgtatct cttttcaccc ttctcccacc ctcgctcgcg       120
tascatggcg gagcgtcggc ggccactcag tcccattcca tctcctcgtc gtccttcgga       180
gccgagccgt ccgcgcccgg cggcggcggg agcccaggag cctgccccgc cctggggacg       240
aagagctgca gctcctcctg tgcggtgcac gatctgattt tctggagaga tgtgaagaag       300
actgggtttg tctttggcac cacgctgatc atgctgcttt ccctggcagc tttcagtgtc       360
atcagtgtgg tttcttacct catcctggct cttctctctg tcaccatcag cttcaggatc       420
tacaagtccg tcatccaagc tgtacagaag tcagaagaag gccatccatt caaagcctac       480
ctggacgtag acattactct gtcctcagaa gctttccata attacatgaa tgctgccatg       540
gtgcacatca acagggccct gaaactcatt attcgtctct ttctggtaga agatctggtt       600
gactccttga agctggctgt cttcatgtgg ctgatgacct atgttggtgc tgtttttaac       660
ggaatcaccc ttctaattct tgctgaactg ctcattttca gtgtcccgat tgtctatgag       720
aagtacaaga cccagattga tcactatgtt ggcatcgccc gagatcagac caagtcaatt       780
gttgaaaaga tccaagcaaa actccctgga atcgccaaaa aaaaggcaga ataagtacat       840
ggaaaccaga aatgcaacag ttactaaaac accatttaat agttataacg tcgttacttg       900
tactatggaa gaaaatactc agtgtcagct tgagcctgca ttccaagctt tttttttaat       960
ttggtgtttt ctcccatcct ttcccttaa ccctcagtat caagcacaaa aattgatgga      1020
ctgataaaag aactatctta gaactcagaa gaagaaagaa tcaaattcat aggataagtc      1080
aatacccttaa tggtggtaga gcctttacct gtagcttgaa aggggaaaga ttggaggtaa      1140
gagagaaaat gaaagaacac ctctgggtcc ttctgtccag ttttcagcac tagtcttact      1200
cagctatcca ttatagtttt gccccttaaga agtcatgatt aacttatgaa aaaattattt      1260
ggggacagga gtgtgataccc ttcctggtt ttttttttgca gccctcaaat cctatcttcc      1320
tgccccacaa tgtgagcgagc tacccctgat actcctttttc tttaatgatt taactatcaa      1380
cttgataaat aacttatagg tgatagtgat aattcctgat tccaagaatg ccatctgata      1440
aaaaagaata gaaatggaaa gtgggactga gagggagtca gcaggcatgc tgcggtggcg      1500
gtcactccct ctgccactat ccccagggaag ggaaargctc cgccatttgg gaaagtggtt      1560
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catgtgggct cctcagttat tgagtttttg tgatcctatc tcagtctggg ggggaacatt      1800
ctcaagaggt gaaatacaga aagccttttt ttcttgatct tttcccgaga ttcaaatctc      1860
cgattcccat ttggggggcaa gtttttttct tcaccttcaa tatgagaatt cagcgaactt      1920
gaaagaaaaa tcatctgtga gttccttcag gttctcactc atagtcatga tccttcagag      1980
ggaatatgca ctggcgagtt taaagtaagg gctatgatat ttgatggtcc caaagtacgg      2040
cagctgcaaa aagtagtgga aggaaattgt ctacgtgtct tggaaaaatt agttaggaat      2100
ttggatggat aaaaggtacc cttgccttac tccatcttat tttcttagcc ccctttgagt      2160
gttttaactg gtttcatgtc ctagtaggaa gtgcattcgtc catcctcatc ctctgccctc      2220
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tgccacatcc agttctttttc ttttgttgct gctgaattgaa gataattgaa gagatctttg      2340
tgccacacag gattttttttt ttttttaaga aaaacctata gatgaaaaat tactaatgaa      2400
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tcttggttcc tgtaaaattt caaattgatg tggtattaat aaaaaaaaaa aaaacamaaa      2520
aaaaaaaaaa aaaagggcgg ccgctctaga ggatccaagc ttacgtacgc gtgcatgcga      2580
cgtccatagc tcttctata ggggtcccccc aaattccatt cancgggccg tcggttttan      2640
aaagtcgtg antgggggaa ancc                                               2664


<210> 256
<211> 865
<212> DNA
<213> Homo sapiens

<400> 256
cgtgggagtg aggtaccaga ttcagcccat ttggcccga cgcctctktt ctcggaatcc        60
gggtgctgcg gattgaggtc ccggttccta acggtgggat cggtgtcctc gggatgagat       120
ttggcgttc ctcggggctt tggtgggatc ggtgtcctca ggatgaattt tagggtttcc       180
tcgggggcttt cgggatcttc acctaatatc cggactgcaa gatggaggaa ggcgggaacc       240
taggaggcct gattaaaratg gtccatctac tggtcttgtc aggtgcctgg ggcatgcaaa       300
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tgtgggtgac cttcgtctca ggcttcctgc ttttccgaag ccttccccga cataccttcg    360
gactagtgca gagcaaactc ttccccttct acttccacat ctccatgggc tgtgtgcttca   420
tcaacctctg catcttggct tcacagcatg cttgggctca gctcacattc tgggaggcca    480
gccagcttta cctgctgttc ctgagcctta cgctggccac tgtcaacgcc cgctggctgg    540
aaccccgcac cacagctgcc atgtgggccc tgcaaaccgt ggagaaggag cgaggcctgg    600
gtggggaggt accaggcagc caccagggtc ccgatcccta ccgccagctg cgagagaagg    660
accccaagta cagtgctctc cgccagaatt tcttccgcta ccatgggctg tcctctcttt    720
gcaatctggg ctgcgtcctg agcaatgggc tctgtctcgc tggccttgcc ctggaaataa    780
ggagcctcta gcatgggccc tgcatgctaa taaatgcttc ttcagaaaaa aaaaaaaaaa   840
aaactcgagg ggggccggt accca                                          865


<210> 257
<211> 2082
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<400> 257
tgggggggn aatgggtgtc tggctcangg attgccnaat ctggaaattc tccataactt     60
gctagcttgt ttttttttttt tttttttaca cccccccgcc ccacccccgg acttgcacaa   120
tgttcaatga tctcagcaga gttcttcatg tgaaacgttg atcacctttg aagcctgcat   180
cattcacata tttttttcttc ttcttccct tcagttcatg aactggtgtt cattttctgt   240
gtgtgtgtgt gtttttatttt gtttggatttt tttttttaa ttttacttt agagcttgct   300
gtgttgccca cctttttttcc aacctccacc ctcactcctt ctcaacccat ctcttccgag   360
atgaaagaaa aaaaaaagca aagttttttt ttcttctcct gagttcttca tgtgagattg   420
agcttgcaaa ggaaaaaaaa atgtgaaatg ttatagactt gcagcgtgcc gagttccatc   480
gggtttttttt tttagcattg ttatgctaaa atagagaaaa aaatgctcat gaaccttcca   540
caatcaagcc tgcatcaacc ttctgggtgt gacttgtgag tttttggcctt gtgatgccaa   600
atctgagagt ttagtctgcc attaaaaaaa ctcattctca tctcatgcat tattatgctt   660
gctactttgt cttagcaaca atgaactata actgtttcaa agactttatg gaaaagagac   720
attatattaa taaaaaaaaa aagcctgcat gctggacatg tatggtataa ttattttttc   780
cttttttttt cctttttggct tggaaatgaa cgttcgaaga cttatagcat ggcattcata   840
cttttgttttt attgcctcat gacttttttg agtttagaac aaaacagtgc aaccgtagag   900
ccttcctccc atgaaatttt gcatctgctc caaaactgct ttgagttact cagaacttca   960
acctcccaat gcactgaagg cattccttgt gcaaagtac gcaagatgggt tacacattta  1020
acctggcaaa cattgaagaa ctctttratgt tttcttttta ataagaatga cgcccccactt ·1080
tggggactaa aattgtgcta ttgccgagaa gcagtctaaa atttattttt taaaaagaga  1140
aactgcccca ttattttttgg tttgttttat ttttatttta tatttttttgg cttttggtca  1200
ttgtcaaatg tggagtgctc tgggtttcta gtatataatt taattctagt ttttataatc  1260
tgttagccca gttaaaatgt atgctacaga taaaggaatg ttatagataa atttgaaaga  1320
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tgatgttaag gggggtagag tttgcaaggg gactgtttaa aaaaagtagc ttatacagca  1440
tgtgcttgca acttaaatat aagttgggta tgtgtagtct ttgctatacc actgactgta  1500
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ttgaaaacca aagtattaag aggggaaacg cccctgttta tatctgtagg ggtattttac    1560
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taagatataa cctgcaagca tataatacaa aaaaaaattg caaaactgtt tagaacgcta    1680
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ttttaaaggc aataatcagt aaatgttatt ttcagggact gacatcctgt ctttaaaaag    1860
aaatgaaaag taaatcttac cacaataaat ataaaaaat cttgtcagtt actttttcttt    1920
tacatatttt gctgtgcaaa attgttttat atcttgagtt actaactaac cacgcgtgtt    1980
gttcctatgt gcttttctttt cattttcaat tctggttata tcaagaaaag aataatctac    2040
aataataaac ggcattttttt tttgaaaaaa aaaaaaaaaa aa                       2082
```

<210> 258
<211> 1482
<212> DNA
<213> Homo sapiens

<400> 258
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caggcaggct ggccccgggg acttctctct ggccctgctc cctccgagcg ctccgccgtt      60
gccgcctgg cccctacgga gtccttagcc aggatggagg ctgttgtgaa cttgtaccaa     120
gaggtgatga agcacgcaga tccccggatc cagggctacc ctctgatggg gtcccccttg     180
ctaatgacct ccattctcct gacctacgtg tacttcgttc tctcacttgg gcctcgcatc     240
atggctaatc ggaagccctt ccagctccgt ggcttcatga ttgtctacaa cttctcactg     300
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gtggcctggc tcttcctctt ctccaagttc attgagctga tggacacagt gatctcttatt     480
ctccgaaaga aagacgggca ggtgaccttc ctacatgtct tccatcactc tgtgcttccc     540
tggagctggt ggtggggggt aaagattgcc ccgggaggaa tgggctcttt ccatgccatg     600
ataaactctt ccgtgcatgt cataatgtac ctgtactacg gattatctgc ctttggccct     660
gtggcacaac cctacctttg gtggaaaaag cacatgacag ccattcagct gatccagttt     720
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gctccaggta ttgccaaggt caaggccaac tgagaagcat ggcctagata ggcgcccacc     960
taagtgcctc aggactgcac cttagggcag tgtccgtcag tgccctctcc acctacacct    1020
gtgaccaagg cttatgtggt caggactgag cagggggactg gcctccccct cccacagct    1080
gtctacagg gaccacggct ttggttcctc acccacttcc cccgggcagc tccagggatg    1140
tggcctcatt gctgtctgcc actccagagc tggggctaa aagggctgta cagttatttc    1200
ccctccctg ccttaaaact tgggagagga gcactcaggg ctggccccac aaaggggctc    1260
gtggcctttt tcctcacaca gaagaggtca gcaataatgt cactgtggac ccagtctcac    1320
tcctccaccc cacacactga agcagtagct tctgggccaa aggtcagggt gggcggggggc    1380
ctgggaatac agcctgtgga ggctgcttac tcaacttgtg tcttaattaa aagtgacaga    1440
ggaaaccaaa aaaaaaaaaa aaaaactcga gggggggcccg ta                      1482
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<210> 259
<211> 834
<212> DNA
<213> Homo sapiens

<400> 259
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ggcacgagcg ccgttgcccg cctggcccct acggagtcct tagccaggat ggaggctgtt      60
gtgaacttgt accaagaggt gatgaagcac gcagatcccc ggatccaggg ctaccctctg     120
atggggtccc ccttgctaat gacctccatt ctcctgacct acgtgtactt cgttctctca     180
cttgggcctc gcatcatggc taatcggaag cccttccagc tccgtggctt catgattgtc     240
tacaacttct cactgtgctc tacattgtct atgagttcct gatgtcgggc     300
tggctgagca cctatacctg gcgctgtgac cctcaggact gcacccttag gcagtgtccg     360
tcagtgccct ctccamctac acctgtgacc aaggcttatg tggtcaggac tgagcagggg     420
```

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actggccctc ccctccccac agctgctcta cagggaccac ggctttggtt cctcacccac      480
ttccccgggg cagctccagg gatgtggcct cattgctgtc tgccactcca gagctggggg      540
ctaaaagggc tgtacagtta tttcccctc cctgccttaa aacttgggag aggagcactc      600
agggctggcc ccacaaaggg tctcgtggcc tttttcctca cacagaagag gtcagcaata      660
atgtcactgt ggacccagtc tcactcctcc accccacaca ctgaagcagt agcttctggg      720
ccaaagtca gggtgggcgg gggcctggga atacagcctg tggaggctgc ttactcaact      780
tgtgtcttaa ttaaaagtga cagaggaaac cacgaaaaaa aaaaaaaaaa aaaa           834


<210> 260
<211> 1508
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1481)
<223> n equals a,t,g, or c

<400> 260
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atttctccat gctcaccctc ccaggtcagc gagatggtga agaagctgca cgcggcaaca     120
ccaccaacgt tcggagtgga cctcatcaat gagcttgtgg agaactttgg cagatgtccc     180
aagtggtctg tcggcaagc ctttgtcttt gtctgccaga ctgtcattga ggatgactgc     240
cttcccatgg accagtttgc tgtgcatctc atgccgcatc tgctaacctt agcaaatgac     300
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gactatttct tggcctctgc cagctgccac caggaggctg tggagcagac catcatggct     420
cttcagatgg accgtgacag cgatgtcaag tattttgcaa gcatccaccc tgccagtacc     480
aaaatctccg aagatgccat gagcacagcg tcctcaacct actagaaggc ttgaatctcg     540
gtgtcttcc tgcttccatg agagccgagg ttcagtgggc attcgccacg catgtgacct     600
gggatagctt tcgggggagg agagaccttc ctctcctgcg gacttcattg caggtgcaag     660
ttgcctacac ccaataccag ggatttcaag agtcaagaga aagtacagta aacactatta     720
tcttatcttg actttaaggg gaaataattt ctcagaggat tataattgtc accgaagcct     780
taaatccttc tgtcttcctg actgaatgaa acttgaattg gcagagcatt ttccttatgg     840
aagggatgag attcccagag acctgcattg ctttctcctg gtttttattta acaatcgaca     900
aatgaaattc ttacagcctg aaggcagacg tgtgcccaga tgtgaaagag accttcagta     960
tcagccctaa ctcttctctc ccaggaagga cttgctgggc tctgtggca gctgtccagc    1020
ccagccctgt gtgtgaatcg tttgtgacgt gtgcaaatgg gaaaggaggg gtttttacat    1080
ctcctaaagg acctgatgcc aacacaagta ggattgactt aaactcttaa gcgcagcata    1140
ttgctgtaca catttacaga atggttgctg agtgtctgtg tctgattttt tcatgctggt    1200
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tgatcagctc tgaggtgcaa cttcttcaca tactgtacat acctgtgacc actcttggga    1320
gtgctgcagt ctttaatcat gctgtttaaa ctgttgtggc acaagttctc ttgtccaaat    1380
aaaatttatt aataagatct atagagagag atatatacac ttttgattgt tttctagatg    1440
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cccggtac                                                             1508


<210> 261
<211> 2514
<212> DNA
<213> Homo sapiens

<400> 261
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gcacctacct gtgttggtga ggtttgttga tgaatctcat aacctaagag aggaatttat     120
aggcttcctg cctatgaag ccgatgcaga aatttttggct gtgaaatttc acactatgat     180
aactgagaag tggggattaa atatggagta ttgtcgtggc caggcttaca ttgwctctag     240
```

```
tggattttct tccaaaatga aagttgttgc ttctagactt ttagagaaat atccccaagc      300
tatctacaca ctctgctctt cctgtgcctt aaatatgtgg ttggcaaaat cagtacctgt      360
tatgggagta tctgttgcat taggaacaat tgaggaagtt tgttcttttt tccatcgatc      420
accacaactg cttttagaac ttgcaacgt aatttctgtt cttttccaga acagtcaaaga      480
aagggtaaa gaactgaagg aaatctgcca ttctcagtgg acaggcaggc atgatgcttt      540
tgaaattta gtggaactcc tgcaagcact tgttttatgt ttagatggta taaatagtga      600
cacaaatatt agatggaata actatatagc tggccgagca tttgtactct gcagtgcagt      660
gtcagatttt gatttcattg ttactattgt tgttcttaaa aatgtcctat cttttacaag      720
agcctttggg aaaaacctcc aggggcaaac ctctgatgtc ttctttgcgg ccggtagctt      780
gactgcagta ctgcattcac tcaacgaagt gattggaaaa tattgaagtt tatcatgaat      840
tttggtttga ggaagccaca aatttggcaa ccaaacttga tattcaaatg aaactccctg      900
ggaaattccg caagcgtcac cagggtaact tggaatcca gctaacctct gagagttact      960
ataaagaaac cctaagtgtc ccaacagtgg agcacattat tcaggaactt aaagatatat     1020
tctcagaaca gcacctcaaa gctcttaaat gcttatctct ggtaccctca gtcatgggac     1080
aactcaaatt caatacgtcg gaggaacacc atgctgacat gtatagaagt gacttaccca     1140
atcctgacac gctgtcagct gagcttcatt gttggagaat caaatggaaa cacaggggga     1200
aagatataga gcttccgtcc accatctatg aagccctcca cctgcctgac atcaagtttt     1260
ttcctaatgt gtatgcattg ctgaaggtcc tgtgtattct tcctgtgatg aaggtgaga     1320
atgagcggta tgaaagtgga cgaaagcgtc ttaaagcata tttgaggaac acttttgacag     1380
accaaaggtc aagtaacttg gctttgctta acataaattt tgatataaaa cacgacctgg     1440
atttaatggt ggacacatat attaaactct atacaagtaa gtcagagctt cctacagata     1500
attccgaaac tgtgggaaaat acctaagaga ctttaaaaa taggctttct tatatttgat     1560
atttggaaga aaagccgta agtgtatgta gaccacttaa tcactaaata tctttgccta     1620
taggactcca ttgaatacat tagccatgat aatctacct gtttaaatgg ccctgtttg     1680
aactctcaag ctttgaagac ctacctgttc ttccagaaga gaacgttgaa agtgccatgt     1740
ttcctttttgc gtgatctctg ttgatggcac tctggaattg tttcagttaa gtcattttag     1800
acatagcatt tattatcact gtggatctct acttgttggg tgttatgaat tctttgaaga     1860
aatatatttt gaagaggtgt gggaggaagg aatacatttt ataaaatgtt gtagtgaagc     1920
ccacaattga cctttgacta ataggagttt taagtatgtt aaaaatctat actggacagt     1980
tacaagaaat taccggagaa aagcttgtga gctcaccaaa caaggatttc agtgtagatt     2040
ttgtctttct tgaacttaaa gaaacaaatg acaaagtttg aatggaaaag cctgctgttg     2100
ttccacatct cgttgctgtt tacattcctt tgtggagcct acatcttcct aagctttta     2160
gcaggtatat gttgaacact tctgtttcat ggttgagaca gaatcagagg ccatggatac     2220
tgacaactga tttgtctgtt tttttttctct gtcttttcc atgactctta tatactgcct     2280
catcttgatt tataagcaaa acctggaaaa cctacaaat aagtgttgtg gtttatctag     2340
aaaaaatatgg aaaatattgc tgttatttt ggtgaagaaa atcaattttg tatagtttat     2400
ttcaatctaa ataaaatgtg aattttgttt aaagcttagg cacattattt tttgtggggt     2460
caaaacattc ttgtgtaaat tctcttaaac atttgataaa cagcttcaca attc          2514
```

<210> 262
<211> 2357
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (686)
<223> n equals a,t,g, or c

<400> 262

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ctgccttatg aagccgatgc agaaattttg gctgtgaaat ttcacactat gataactgag       60
aagtgggat taaatatgga gtattgtcgt ggccaggctt acattgtctc tagtgggattt      120
tcttccaaaa tgaaagttgt tgcttctaga aatatcccca agctatctac              180
acactctgct cttcctgtgc cttaaatatg tggttggcaa aatcagtacc tgttatggga      240
gtatctgttg cattaggaac aattgaggaa gtttgttctt ttttccatcg atcaccacaa      300
ctgctttag aacttgacaa cgtaattyct gttcttttc agaacagtaa agaaagggt      360
aaagaactga aggaaatctg ccattctcag tggacaggca ggcatgatgc ttttgaaatt      420
```

```
ttagtggaac tcctgcaagc acttgtttta tgtttagatg gtataaatag tgacacaaat    480
attagatgga ataactatat agctggccga gcatttgtac tctgcagtgc agtgtcagat    540
tttgatttca ttgttactat tgttgttctt aaaaatgtcc tatctttac aagagccttc     600
gggaaaaacc tccagggca aacctctgat gtcttcttg cggccggtag cttgactgca      660
gtactgcatt cactcaacga agtgantgga aaatattgaa gtttatcatg aattttggtt    720
tgaggaagcc acaaatttgg caaccaaact tgatattcaa atgaaactcc ctgggaaatt    780
ccgcagagct caccagggta acttggaatc tcagctaacc tctgagagtt actattaaga   840
aaccctaagt gtcccaacag tggagcacat tattcaggaa cttaaagata tattctcaga   900
acagcacctc aaagtctctta aatgcttatc tctggtaccc tcagtcatgg gacaactcaa  960
attcaatacg tcggaggaac accatgctga catgtataga agtgacttac ccaatcctga   1020
cacgctgtca gctgagcttc attgttggag aatcaaatgg aaacacaggg ggaaagatat   1080
agagcttccg tccaccatct atgaagccct ccacctgcct gacatcaagt tttttcctaa  1140
tgtgtatgca ttgctgaagg tcctgtgtat tcttcctgtg atgaaggttg agaatgagcg    1200
gtatgaaaat ggacgaaagc gtcttaaagc atatttgagg aacactttga cagaccaaag  1260
gtcaagtaac ttggcttgc ttaacataaa ttttgatata aaacacgacc tggatttaat    1320
ggtggacaca tatattaaac tctatacaag taagtcagag cttcctacag ataattccga    1380
aactgtggaa aataccttaag agactttttaa aaataggctt tcttatattt gatatttgga  1440
agaaaaagcc gtaagtgtat gtagaccact taatcactaa atatctttgc ctataggact    1500
ccattgaata cattagccat tgataatcta cctgttaaa tggcccctgt ttgaactctc     1560
aagctttgaa gacctacctg ttcttccaga agagaacgtt gaaagtgcca tgtttccttt    1620
tgcgtgatct ctgttgatgg cactctggaa ttgtttcagt taagtcattt tagacatagc   1680
atttattatc actgtggatc tctacttgtt gggtgttatg aattctttga agaaatatat    1740
tttgaagagg tgtgggagga aggaatacat tttataaaat gttgtagtga agcccacaat   1800
tgaccttga ctaataggag ttttaagtat gttaaaaatc tatactggac agttacaaga    1860
aattaccgga gaaaagcttg tgagctcacc aaacaaggat ttcagtgtag attttgtctt    1920
tcttgaactt aaagaaacaa atgacaaagt ttgaatggaa aagcctgctg ttgttccaca   1980
tctcgttgct gtttacattc ctttgtggag cctacatctt cctaagcttt ttagcaggta   2040
tatgttgaac actttcgttt catggttgag acaggccatgga tactgacaac tctcatcttg  2100
tgatttgtct gttttttttc tctgtctttt tccatgactc ttatacactg cctcatcttg    2160
atttataagc aaaacctgga aaacctacaa aataagtgtt gtggtttatc tagaaaaata   2220
tggaaaaaat tgctgttatt tttggtgaag aaaatcaatt ttgtatagtt tatttcaatc   2280
taaataaaat gtgaattttg tttaaagctt aggcacatta ttttttgtgg ggtcaaaaca    2340
ttcttgtgta aattctc                                                   2357
```

<210> 263
<211> 689
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (644)
<223> n equals a,t,g, or c

<400> 263

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acttctggt gcaaaagat gttcaagcct tattttatac ttgcctgccc ctttctcttt     60
catttattgg agtgagctgc agctctaaga agacctgttc ttttgaatgg agagtagcat   120
caggaaccag gatgtgggtg cgaggcgtgc tcctggctgt tgcagattgc tgcacccggg   180
agctcttagt ggacagagct agaggatatg tgcacgtact tccatctctc tctctgtctc    240
cgatttagc ccagcaccac agggtacgtt ccagtttttc cctctttcca tagctgtaag    300
gcccttctg ggaatggttc tcattctcct taatctatta ttgggtcagt tttcctgcat    360
gtcccagcc tccatcact gccacccact ccccacagag atgccctgct catccgactg      420
gggctttgac tcccacactg tgtacccctc ttgtgtggac gccctgcctgc caaaaccttc  480
agcaaacagc tttccaaatg gaagttgtca ctgtcarggs ctttacaatc agcaacagca   540
aaatctacat gctgctgagg gtcctgcctc attaagatgc aatataatatg taagtacata  600
aaaacagcaa tagaagaaac gtaatgcttt attctcaaat atgnatgtct acatagaaaa   660
gccaaaatta ttaagaatag taaggaatt                                      689
```

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<210> 264
<211> 2377
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (566)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (588)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (902)
<223> n equals a,t,g, or c

<400> 264
tcgaccacg  cgtccgccga  tgtgatgatt  cctgcgtatt  ccaagaaccg  ggcctatgcc       60
atcttcttca  tagtcttcac  tgtgataggg  gacgcccccg  gcgctgtgct  atcctgtgcc      120
ggccaccctt  gcgttggttt  tgctgctgta  ctggtggcgc  cctgaccgt  ggctgtctcc      180
tcttgaagga  agcctgtttc  tgatgaacct  gctgacagcc  atcatctaca  gtcagttccg      240
gggctacctg  atgaaatctc  tccagacctc  gctgtttcgg  aggcgggtgg  gaacccggct      300
gcctttgaag  tcctatcctc  catggtgggg  gagggaggag  cctcctca  ggcagttggg      360
gtgaagcccc  agaacttgct  gcaggtgctt  cagaaggtcc  agctggacag  ctcccacaga      420
caggccatga  tggagaaggt  gcgttcctat  ggcagtgttc  tgctctcagc  tgaggagttt      480
cagaagctct  tcaacgagct  tgacagaagt  gtggttaaag  agcaccgcc  gaggcccgag      540
taccagtctc  cgtttctgca  gagcgnccca  gttcctcttc  ggccactnac  tactttgact      600
acctgggga  cctcatcgcc  ctggcaaacc  tggtgtccat  ttgcgtgttc  ctggtgctgg      660
atgcagatgt  tgctgcctgc  tgagcgtgat  gacttcatcc  tggggggtct  caactgcgtc      720
ttcattgtgt  actacctgtt  ggagatgctg  gctcaagtc  ttttgccctg  gggcctgcga      780
rggtacykkt  cctaacccca  rcaamgtgtt  ttgaacgggc  tcctcamcgt  ttgtcctggc      840
tggwwkkgsm  gatctcaact  ctggctgtgt  accgattgcc  acacccaggc  tggaggccgg      900
anatggtggg  cctgctgtcg  ctgtgggaca  tgacccgcat  actgaacatg  ctcatcgtgt      960
tccgcttcct  gcgtatcatc  cccagcatga  agccgatggc  cgtggtggcc  agtaccgtcc     1020
tgggcctggt  gcaaaacatg  cgtgcgtttg  gcgggatcct  ggtggtggtc  tactacgtat     1080
ttgccatcat  tgggatcaac  ttgtttagag  gcgtcattgt  ggctcttcct  ggaaacagca     1140
gcctggcccc  tgccaatagg  tcggcgccct  gtgggagctt  cgagcagctg  gagtactggg     1200
ccaacaactt  cgatgacttt  gcggctgccc  tggtcactct  gtggaacttg  atggtggtga     1260
acaactggca  ggtgtttctg  gatgcatatc  ggcgctacta  aggcccgtgg  tccaagatct     1320
attttgtatt  gtggtggctg  gtgtcgtctg  tcatctgggt  caacctgttt  ctggcccctga     1380
ccccagaggc  cacctaccag  atgactgtgg  agctcctgtt  cagggatatt  ctggaggagc     1440
ccgggggagga  tgagctcaca  gagaggctga  gccagcaccc  gcacctgtgg  ctgtgcaggt     1560
gacgtccggg  tctgccatcc  cagcaggggc  ggcaggagag  agaggctggc  ataacacagg     1620
tgcccatcat  tggaagaggcg  gccatgctgt  ggccagccag  gcaggaagag  accttcctc     1680
tgacggacca  ctaagctggg  gacaggaacc  aagtcctttg  cgtgtggcc  aacaaccatt     1740
tacagaacag  ctgctggtgc  ttcagggagg  cgccgtgccc  tccgctttct  tttatagctg     1800
cttcagtgag  aattcccttg  tcgactccac  agggacctt  cagacaaaaa  tgcaagaagc     1860
agcggcctgc  cctgtccct  gcagcttccg  tggtgccttt  gctgccggca  gccttgggg     1920
accacaggcc  tgaccaggge  ctgcacaggt  taacgtcag  acttccggggg  cattcagctg     1980
ggaatgatac  taatacctcc  gattttagcc  cagcaccaca  gggtacgttc  cagtttttat     2040
ttctttccat  agctgtaagg  ccctttctgg  gaatggttat  cattctcctt  aatctattat     2100
```

```
tgggtcagtt ttcctgcatg tccccagcct cccatcactg ccacccactc cccacagaga    2160
tgccctgctc atccgactgg ggctttgact cccacactgt gtacccctct tgtgtggacg    2220
ccctgctgcc aaaaccttca gcaaacagct ttccaaatgg aagttgtcac tgtcagggcc    2280
tttacaatca gcaacagcaa aatctacatg ctgctgaggg tcctgcctca ttaagatgca    2340
ataaatatgt aagtacataa aaaaaaaaaa aaaaaaa                             2377
```

```
<210> 265
<211> 1193
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<400> 265
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tctgntcgcc gtcgccccgc ccctggcctt tgcccggtcg ggcgggactt cctgtgtcgt     60
atttccaagg actccaaagc gaggccgggg actgaaggtg tgggtgtcga gccctctggc    120
agagggttaa cctgggtcaa atgcacggat tctcacctcg tacagttacg ctctcccgcg    180
gcacgtccgc gaggmyttga agtcctgagc gctcaagttt gtccgtagtc gagagaaggc    240
catggaggtg ccgccaccgg caccgcggag ctttctctgt agagcattgt gcctatttcc    300
ccgagtcttt gctgccgaag ctgtgactgc cgattcggaa gtccttgagg agcgtcagaa    360
gcggcttccc tacgtcccag agccctatta cccggaatct ggatgggacc gcctccggga    420
gctgtttggc aaagacacag tgaacactag tctgaatgta taccgaaata aagatgcctt    480
aagccatttt gtaattgcag gagctgtcac gggaagtctt tttaggataa acgtaggcct    540
gcgtggctgg tggctggtgg cataattgga gccttgctgg gcactcctgt aggaggcctg    600
ctgatggcat ttcagaagta ctctggtgag actgttcagg aaagaaaaca gaaggatcga    660
aaggcactcc atgagctaaa actggaagag tggaaaggca gactacaagt tactgagcac    720
ctccctgaga aaattgaaag tagtttacag gaagatgaac ctgagaatga tgctaagaaa    780
attgaagcac tgctaaacct tcctagaaac ccttcagtaa tagataaaca agacaaggac    840
tgaaagtgct ctgaacttga aactcactgg agagctgaag ggagctgcca tgtccgatga    900
atgccaacag acaggccact ctttggtcag cctgctgaca aatttaagtg ctggtacctg    960
tggtggcagt ggcttgctct tgtcttttc ttttcttttt aactaagaat ggggctgttg   1020
tactctcact ttacttatcc ttaaatttaa atacatactt atgtttgtat taatctatca   1080
atatatgcat acatgaatat atccacccac ctagatttta agcagtaaat aaaacatttc   1140
gcaaaagatt aaagttgaat tttacagtta aaaaaaaaaa aaaaaaaaaa aaa          1193
```

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<210> 266
<211> 1262
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1203)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1242)
<223> n equals a,t,g, or c

<400> 266
```

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gaaaaaccca aagatgcaga caatctcttt gaacatgaat tggggctct caatatggct      60
gcattactac gaaaagaaga aagagcaagt cttcttagta atcttggccc atgttgtaag    120
```

```
gcgttgtgct tcagacggga ttctgcaatt cgaaagcagc ttgttaaaaa tgagaagggc      180
accataaaac aagcttacac gagtsctcca atggtagaca atgaattact tcgattgagt      240
cttcggttat ttaagcggaa gactacttgc catgctccag gacatgaaaa gactgaagat      300
aataaacttt cacagtccag tatccaacag gaactgtgtg tgtcttaaga ccgaagttca      360
atatggtatt tttggtactg tcttccttca gcagtgcata ttctttgca  aagttctttg      420
gtttgacaag cattagtgac aaaggcagaa aagatttatc agccatgcta aaagagtgaa      480
gaattttgat ctttagagac actagttttg gccaacttaa gattttacgt taattttttac      540
atagtatttg acactcatgc aaaataatgt gaaaacatct agatttagta gtttattctg      600
cgccttttgt taaaactgaa gattttggaa aatggttgtc actgctcttc cagcctatga      660
atatttttgt gaaatggaac catggattta tgtctggatc atccatacag aaccaacaat      720
tttattcaaa aacaatgtgt tcatcaaagt aattgctcac attgtgcagt actatgttgt      780
acagaccacg tgaaagggaa tgctggtcta gctggcgtgg tatgtttata ggcgaatttc      840
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gtcttttttt taattaatat gcgtgcattg ttacaatgta tgttggatgt cttttgaccc      960
taaatgcttt tttgttatc agagattgtg tactattttt attttttaata aatgtatctt     1020
cccttttctt gttttagatt tactttgctc ttcgttaatc ttattcctga tgatctagaa     1080
cattagtcat caacattaca tgtttcatgc ttcagatatt ttactgcttg tgtccttatt     1140
gttggacagc tttaaacaga gttgatggta cttcaaatat agctcattga tacttaaggg     1200
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gt                                                                     1262


<210> 267
<211> 1179
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (69)
<223> n equals a,t,g, or c

<400> 267
ggcaaacttt cccccaangc ttcgaaactt gcaagccgaa accttgaatc gttaaaagtt       60
gggttgcgnc ggcgccctgg cccgaagaag cgcaattggc gttccgcgaa cgttggccct      120
caacggctcg gcagccagcc atgtcctgca ccaggacag  cgccctggg  ctacaaggac      180
ctggacctca tcttcctgcg ccgacctgcg cgggaaggg  gagtttcaga ctgtgaagga      240
cgtcgtgctg gactgcctgt tggacttctt acccgagggg gtgaacaaag agaagatcac      300
accactcacg ctcaaggaag cttatgtgca gaaaatggtt aaagtgtgca atgactctga      360
ccgatggagt cttatatccc tgtcaaacaa cagtggcaaa aatgtggaac tgaaatttgt      420
ggattcctc  cggaggcagt ttgaattcag tgtagattct tttcaaatca aattagactc      480
tcttctgctc ttttatgaat gttcagagaa cccaatgact gagacatttc accccacaat      540
aatcggggag agcgtctatg gcgatttcca ggaagccttt gatcaccttt gtaacaagat      600
cattgccacc aggaacccag aggaaatccg aggggaggc  ctgcttaagt actgcaacct      660
cttggtgagg ggcttaggc  ccgcctctga tgaaatcaag accttcaaa  ggtatatgtg      720
ttccaggttt ttcatcgact tctcagacat tggagagcag cagagaaaac tggagtccta      780
tttgcagaac cactttgtgg gattggaaga ccgcaagtat gagtatctca tgacccttca      840
tggagtggta aatgagagca cagtgtgcct gatgggacat gaaagaagac agactttaaa      900
ccttatcacc atgctggcta tccgggtgtt agctgaccaa aatgtcattc ctaatgtggc      960
taatgtcact tgctctacc  agccagcccc ctatgtagca gatgccaact ttagcaatta     1020
ctacattgca caggtcagc  cagtattcac gtgccagcaa cagacctact ccacttggct     1080
accctgcaat taagaatcat ttaaaaatgt cctgtgggga agccatttca gacaagacag     1140
gagagaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagagc                            1179
```

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<210> 268
<211> 1162
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (69)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1151)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1154)
<223> n equals a,t,g, or c

<400> 268
ggcaaacttt cccccaangc ttcgaaactt gcaagccgaa accttgaatc gttaaaagtt      60
gggttgcgnc ggcgccctgg cccgaagaag cgcaattggc gttccgcgaa cgttggccct     120
caacggctcg gcagccagcc atgtcctgca cccaggacag cggccctggg ctacaaggac     180
ctggacctca tcttcctgcg ccgacctgcg cggggaaggg gagtttcaga ctgtgaagga     240
cgtcgtgctg gactgcctgt tggacttctt acccgagggg gtgaacaaag agaagatcac     300
accactcacg ctcaaggaag cttatgtgca gaaaatggtt aaagtgtgca atgactctga     360
ccgatggagt cttatatccc tgtcaaacaa cagtggcaaa aatgtggaac tgaaatttgt     420
ggattccctc cggaggcagt ttgaattcag tgtagattct tttcaaatca aattagactc     480
tcttctgctc ttttatgaat gttcagagaa cccaatgact gagacatttc accccacaat     540
aatcgggggag agcgtctatg gcgatttcca ggaagccttt gatcaccttt gtaacaagat     600
cattgccacc aggaacccag aggaaatccg aggggaggc ctgcttaagt actgcaacct     660
cttggtgagg ggctttaggc ccgcctctga tgaaatcaag acccttcaaa ggtatatgtg     720
ttccaggttt ttcatcgact tctcagacat tggagagcag cagagaaaac tggagtccta     780
tttgcagaac cactttgtgg gattggaaga ccgcaagtat gagtatctca tgaccccttca     840
tggagtggta aatgagagca cagtgtgcct gatgggacat gaaagaagac agactttaaa     900
ccttatcacc atgctggcta tccgggtgtt agctgaccaa aatgtcattc ctaatgtggc     960
taatgtcact tgctattacc agccagcccc ctatgtagca gatgccaact ttagcaatta    1020
ctacattgca caggttcagc cagtattcac gtgccagcaa cagacctact ccacttggct    1080
accctgcaat taagaatcat ttaaaaatgt cctgtgggga agccatttca gacaagacag    1140
gagagaaaaa naangaaaag ag                                            1162


<210> 269
<211> 735
<212> DNA
<213> Homo sapiens

<400> 269
cgggctgggt atttgcctcg caccatggcg cccaaggca aagtgggcac gagagggaag      60
aagcagatat ttgaagagaa cagagagact ctgaagttct acctgcggat catactgggg     120
```

```
gccaatgcca tttactgcct tgtgacgttg gtcttctttt actcatctgc ctcattttgg      180
gcctggttgg ccttgggctt tagtctggca gtgtatgggg ccagctacca ctctatgagc      240
tcgatggcac gagcagcgtt cttctgagga tggggccctg atggatggtg gcacgagctc      300
aacatggagc agggcatggc agagcacctt aaggatgtga tcctactgac agccatcgtg      360
caggtgctca gctgcttctc tctctatgtc tggtccttct ggcttctggc tccaggccgg      420
gccctttacc tcctgtgggt gaatgtgctg ggcccctggt tcactgcaga cagtggcacc      480
ccagcaccag agcacaatga gaaacggcag cgccgacagg agcggcggca gatgaagcgg      540
ttatagccat tgacattgtg ccacaggcc actggccctg ggtggctctg tcagggtgca      600
cagcccctca tgcctggagc aatgagggtc tagtccaggg gccaaaagca gtctgaggta      660
ttgggtatac ttatatctcta tagggtcgtt gaataaatgg cttagaatgt gaaaaaaaaa      720
aaaaaaaaaa atttt                                                        735
```

<210> 270
<211> 783
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (654)
<223> n equals a,t,g, or c

<400> 270

```
aagtgcatga gctgccgatg tggtgcttag tgattgcggt ttcggtcgct ctcccgtgtt       60
tcccggggctg ggtatttgcc tcgcaccatg gcgcccaagg gcaaagtggg cacgagaggg      120
aagaagcaga tatttgaaga gaacagagag actctgaagt tctacctgcg gatcatactg      180
ggggccaatg ccatttactg ccttgtgacg ttggtcttct tttactcatc tgcctcattt      240
tgggcctggt tggcctgggc tttagtctgg cagtgtatgg ggccagctac cactctatga      300
gctcgatggc acgagcagcg ttctctgagg atggggccct gatggatggt ggcatggacc      360
tcaacatgga gcagggcatg gcagagtgag tgtccccac cgccagccca ggcaccttaa      420
ggatgtgatc ctactgacag ccatcgtgca ggtgctcagc tgcttctctc tctatgtctg      480
gtccttctg cttctggctc caggccggc cctttacctc ctgtgggtga atgtgctggg      540
ccctggttc actgcagaca gtggcacccc agcaccagag cacaatgaga aacggcagcg      600
ccgacaggag cggcggcaga tgaagcggtt atagccattg acgattttkgc sacnrgccac      660
tggccctggg tggctctgtc agggtgcaca gcccctcatg cctggagcaa tgagggtcta      720
gtccagggc caaaagcagt ctgaggtatt gggtatactt atactctata gggtcgttga      780
ata                                                                     783
```

<210> 271
<211> 1638
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (51)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (92)
<223> n equals a,t,g, or c

<400> 271

```
ggcacgaggc ggcggcagcg gtggcggcgg cgcccccgg cgggagccgt nccctttccc       60
gtcggggacg gcgggycgg ggyccagggg anccgggmc acgagagcg ggaagaggat      120
```

```
ggattgcccg gccctccccc ccggatggaa gaaggaggaa gtgatccgaa aatctgggct        180
aagtgctggc aagagcgatg tctactactt cagtccaagt ggtaagaagt tcagaagcaa        240
gcctcagttg gcaaggtacc tgggaaatac tgttgatctc agcagttttg acttcagaac        300
tggaaagatg atgcctagta aattacagaa gaacaaacag agactgcgaa acgatcctct        360
caatcaaaat aagggtaaac cagacttgaa tacaacattg ccaattagac aaacagcatc        420
aattttcaaa caaccggtaa ccaaagtcac aaatcatcct agtaataaag tgaaatcaga        480
cccacaacga atgaatgaac agccacgtca gcttttctgg gagaagaggc tacaaggact        540
tagtgcatca gatgtaacag aacaaattat aaaaaccatg gaactaccca aaggtcttca        600
aggagttggt ccaggtagca atgatgagac ccttttatct gctgttgcca gtgctttgca        660
cacaagctct gcgccaatca cagggcaagt ctccgctgct gtggaaaaga accctgctgt        720
ttggcttaac acatctcaac ccctctgcaa agctttttatt gtcacagatg aagacatcag        780
gaaacaggaa gagcgagtac agcaagtacg caagaaattg gaagaagcac tgatggcaga        840
catcttgtcg cgagctgctg atacagaaga gatggatatt gaaatggaca gtggagatga        900
agcctaagaa tatgatcagg taactttcga ccgacttttcc ccaagagaaa attcctagaa        960
attgaacaaa aatgtttcca ctggctttttg cctgtaagaa aaaaaatgta cccgagcaca      1020
tagagctttt taatagcact aaccaatgcc tttttagatg tattttttgat gtatatatct      1080
attattcaaa aaatcatgtt tattttgagt cctaggactt aaaatttagtc ttttgtaata      1140
tcaagcagga ccctaagatg aagctgagct tttgatgcca ggtgcaatct actggaaatg      1200
tagcacttac gtaaaacatt tgtttcccccc acagtttttaa taagaacaga tcaggaattc      1260
taaataaatt tcccagttaa agattattgt gacttcactg tatataaaca tattttttata      1320
ctttattgaa aggggacacc tgtacattct tccatcrtca ctgtaaagac aaataaatga      1380
ttatattcac agactgattg gaattctttc tgttgaaaag cacacacaat aaagaacccc      1440
tcgttagcct tcctctgatt tacattcaac tctgatcccg gggccttagg tttgacatgg      1500
gaggtgggag gaagatagcg catatatttg cagtatgaac tattgcctct gggacgttgt      1560
gaggaattgt gctttcacca gaatttctaa ggatttctgg cttaaatatc acctagcctg      1620
tggtaatttt ttttcccct                                                    1638


<210> 272
<211> 1455
<212> DNA
<213> Homo sapiens

<400> 272
cgtgcgtact gccatgcagg taccgggtcc ggaattccca gggtcgaccc acgcgtccgc         60
tcagttggca aggtacctgg gaaatactgt tgatctcagc agttttgact tcagaactgg        120
aaagatgatg cctagtaaat tacagaagaa caaacagaga ctgcgaaacg atcctctcaa        180
tcaaaataag ggtaaaccag acttgaatac aacattgcca attagacaaa cagcatcaat        240
tttcaaacaa ccggtaacca aagtcacaaa tcatcctagt aataaagtga aatcagaccc        300
acaacgaatg aatgaacagc cacgtcagct tttctgggag aagaggctac aaggacttag        360
tgcatcagat gtaacagaac aaattataaa accatggaa ctacccaaag gtcttcaagg        420
agttggtcca ggtagcaatg atgacccct tttatctgct gttgccagtg ctttgcacac        480
aagctctgcg ccaatcacag ggcaagtctc cgctgctgtg gaaaagaacc ctgctgtttg        540
gcttaacaca tctcaaccc tctgcaaagc tttttattgtc acagatgaag acatcaggaa        600
acaggaagag cgagtacagc aagtacgcaa gaaattggaa gaagcactga tggcagacat        660
cttgtcgcga gctgctgata cagaagagat ggatattgaa atggacagtg gagatgaagc        720
ctaagaatat gatcaggtaa ctttcgaccg acttttcccc aagagaaaat tcctagaaat        780
gaacaaaaat gtttccactg gctttttgcct gtaagaaaaa aaatgtaccc gagcacatag        840
agctttttaa tagcactaac caatgccttt ttagatgtat ttttgatgta tatatctatt        900
attcaaaaaat tcatgttat tttgagtcct aggacttaaa attagtctt tgtaatatca        960
agcaggacc taagatgaag ctgagctttt gatgccaggt gcaatctact ggaaatgtag      1020
cacttacgta aaacatttgt ttcccccaca gttttaataa gaacagatca ggaattctaa      1080
ataaatttcc cagttaaaga ttattgtgac ttcactgtat ataaacatat ttttatactt      1140
tattgaaagg ggacaacctgt acattcttcc atctcactg taaagacaaa taaatgatta      1200
tattcacaga ctgattggaa ttcttctgt gaaaagcac acacaataaa gaacccctcg      1260
ttagccttcc tctgatttac attcaactct gatcccgggg ccttaggtt gacatgggag      1320
gtgggaggaa gatagcgcat atatttgcag tatgaactat tgcctctggg acgttgtgag      1380
gaattgtgct ttcaccagaa tttctaagga tttctggctt aaatatcacc tagcctgtgg      1440
```

```
taattttttt tccct                                                          1455


<210> 273
<211> 1086
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1073)
<223> n equals a,t,g, or c

<400> 273
cgcctgcagt accggtccgg aattcccggg tcgacccacg cgtcgctgac ccaggagaag         60
ctgcctgtct acatcagcct gggctgcagc cgcggggccg cgcagctgaac                  120
tatgtgctct tcagggcggg caccgtgttg cattcatctt tgtaccccca gcatctagca        180
gtgttggcat gtagtaggca ctcaagaaat gtgtgttgaa tgaacgatgc ctgtgtacaag       240
caagcggact ttattctttc ctgacccttg ctcctatgac acacctcctc ctgactgcca        300
ctgtcactcc ttcagagcag aactcctcta gggaacctgg atgggaaaca gccatggcca        360
aggacatcct gggtgaagca gggctacact ttgatgaact gaacaagctg agggtgttgg        420
acccagaggt tacccagcag accatagagc tgaaggaaga gtgcaaagac tttgtgggaca       480
aaattggcca gtttcagaaa atagttggtg gtttaattga gcttgttgat caacttgcaa       540
aagaagcaga aaatgaaaag atgaaggcca tcggtgctcg gaacttgctc aaatctatag        600
caaagcagag agaagctcaa cagcagcaac ttcaagccct aatagcagaa aagaaaatgc        660
agctagaaag gtatcgggtt gaatatgaag ctttgtgtaa agtagaagca gaacaaaatg        720
aatttattga ccaatttatt tttcagaaat gaactgaaaa tttcgctttt atagtaggaa       780
ggcaaaacaa aaaaaagcct ctcaaaacca aaaaacctc tgtagcattc cagcggcttg        840
accaatgacc tatgtcacaa gaggtggcgt gtaaggaatg cagcccctg aagacagcac        900
tacaagtctg gggagccag ttttaacatc agtgcacagc tgctgctggt ggccctgcag        960
tgtacgttct cacctcttat gcttagttgg aactaagcag tttgtaaact ttcatcctt       1020
tttttgtaaa ttcacaaagc tttggaagga gargcaataa attttttgktt tcnaaatggc     1080
ttgatg                                                                  1086


<210> 274
<211> 1003
<212> DNA
<213> Homo sapiens

<400> 274
ggcacgggag cagccgggct ggtcctgctg cgagccggcg gccccggagtg gggcggcgga        60
gcaaacatga acgttggagt tgcccacagt gaagtgaatc caaataccg tgtcatgaac        120
agccggggta tgtggctgac atatgcattg ggagttggct tgcttcatat tgtcttactc       180
agcattccct tcttcagtgt tcctgttgct tggactttaa caaatattat acataatctg      240
gggatgtacg tattttttgca tgcagtgaaa ggaacacctt tcgaaactcc tgaccaggt      300
aaaagcaagg ctcctaactc attgggaaca actggactgt ggagtacagt ttacatcttc      360
acggaagttt ttcacaattt ctccaataat tctatatttt ctggccaagt tctatacgaa      420
gtatgatcca actcacttca tcctaaacac agcttctctc ctgagtgtac taattcccaa      480
aatgccacaa ctacatggtg ttcggatctt tggaattaat aagtattgaa atgttttgaa     540
actgaaaaaa aattttacag ctactgaatt tcttataagg aaggagtggt tagtaaactg     600
cactgtttct ctgataatgt gaaatgagaa gtatttacat tggagggcca atggctggtc     660
cttcaagtgc tgtttgaag tgcagatttc cattaaatga tgcctctgtt taatacacct     720
ggtacatttc tgaagagggg ctttataagc aggctgggca ggcccagctt ataagttaaa     780
gggcatcaca gtgagggtgt agtagataaa ttcaaggaaa taagagattt gtaagaaact      840
aggaccagct taacttataa tgaatgggca ttgtgttaag aaaagaacat ttccagtcat     900
tcagctgtgg ttatttaaag cagacttaca tgtaaaccgg aatcctctct atacaagttt     960
attaaagatt attttttatta ccgtaaaaaa aaaaaaaaa aaa                       1003
```

```
<210> 275
<211> 1234
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1219)
<223> n equals a,t,g, or c

<400> 275
  atcagcatct acaagtagca tattttggat ggtgtttgtg tgctacttca aagtaactag        60
  gaaaaaataa tcctcgcaac acaggtacct tgtcatgtca gaattggggg tgttaggttg       120
  ccagttgtat cagtgttgat tcatttcatt acttcctaca gagcaaacat gaacgttgga       180
  gttgcccaca gtgaagtgaa tccaaatacc cgtgtcatga acagccgggg tatgtggctg       240
  acatatgcat tgggagttgg cttgcttcat attgtcttac tcagcattcc cttcttcagt       300
  gttcctgttg cttggacttt aacaaatatt atacataatc tgggdatgta cgtatttttg       360
  catgcagtga aaggaacacc tttcgaaact cctgaccagg gtaaagcaag gctcctaact       420
  cattgggaac aactggacta tggagtacag tttacatctt cacggaagtt tttcacaatt       480
  tctccaataa ttctatattt tctggcaagt ttctatacga agtatgatcc aactcacttc       540
  atcctaaaca cagcttctct cctgagtgta ctaattccca aaatgccaca actacatggt       600
  gttcggatct ttggaattaa taagtattga aatgttttga aactgaaaaa aaattttaca       660
  gctactgaat ttcttataag gaaggagtgg ttagtaaact gcactgtttc tstgataatg       720
  tgaaatgaga agtatttaca ttggagggc aatggctggt ccttcaagtg ctgtttgaa        780
  gtgcagattt ccattaaatg atgcctctgt ttaatacacc tggtacattt ctgaagaggg       840
  gctttataag cargctgggc aggcccagct tataagttaa agggcatcac agtgagggtg       900
  tagtagataa attcaaggaa ataagagatt tgtaagaaac taggaccagc ttaacttata       960
  atgaatgggc attgtgttaa gaaaagaaca tttccagtca ttcagctgtg gttatttaaa      1020
  gcagacttac atgtaaaccg gaatcctctc tatacaagtt tattaaagat tatttttatt     1080
  accrtacata tttckcttgt tttatgtaag yggatgtata tcctcttgtt ttatacaagc     1140
  cagttcccac ttatgagggt actttttgg ttttgctggg cttaatattg tgtattggtc      1200
  aatgaggcca tttttacant tattaacgtt acag                                 1234

<210> 276
<211> 574
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<400> 276
  ngaggtgcgt tctgagccgt ctgtcctgcg ccaagatgct tcaaagtatt attaaaaaca        60
  tatggatccc catgaagccc tactacacca aagtttacca ggagatttgg ataggaatgg       120
  ggctgatggg cttcatcgtt tataaaatcc gggctgctga taaaagaagt aaggctttga       180
  aagcttcagc gcctgctcct ggtcatcact aaccagattt acttggagta catgtgaaag       240
  aaaacgtcag tctgcctgta aatttcagca agccgtgtta gatggggagc gtggaacgtc       300
  actgtacact tgtataagta ccgtttactt catggcatga ataaatggat ctgtgagatg       360
  cactgctacc tggtactgct ttcagtgtgt tcccctcag ccctccggcg tgtcaggcat        420
  actctgagta gataaatttgt catgcagcgc atgcaatcag aatctcactg agccacccat       480
  cattgtgaaa taattacctc agttgtacag gacttggtga tcaggatcca ggcactcact       540
  tgtattctac tgctccaataa acgtttatta aact                                 574
```

```
<210> 277
<211> 1731
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (492)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (515)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1676)
<223> n equals a,t,g, or c

<400> 277
gctgcaaggt gcgcctcgtg ccgctgcaga tccagctcac tacccctggga aatcttacac        60
cttcaagcac tgtgtttttc tgctgtgata tgcaggaaag gttcagacca gccatccaagt       120
attttgggga tattattagc gtgggacaga gattgttgca aggggcccgg attttaggaa        180
ttcctgttat tgtaacagaa caatacccta aaggtcttgg gagcacggtt caagaaattg        240
atttaacagg tgtaaaactg gtacttccaa agaccaagtt ttcaatggta ttaccagaag        300
tagaagcggc attagcagag attcccggag tcaggagtgt tgtattattt ggagtagaaa        360
ctcatgtgtg catccaacaa actgccctgg agctagttgg ccgaggagtc gaggttcaca        420
ttgttgctga tgccaccttca tcaagaagca tgatggacag gatgtttgcc ctcgagcgtc        480
tcgctcrarc cngggatcat agtgaccacg agtgnaggct gttctgcttc agctggtagc        540
tgataaggac catccaaaat tcaaggaaat tcagaatcta attaaggcga gtgctccaga        600
gtcgggtctg ctttccaaag tataggacat ttgaagaact ggtatgctac tcactggtga        660
aggacagtca ggtgaaggac tgtaagccca cacaagctct tcttatctct actagaatta       720
aaatgttaag tcaaaaacgg ctcctttttt gcgcctccta gtgaacttaa ccagctagac       780
catttgagta ccagcattta gttacaaacg tcaaaggctt ccggtgctgc ttaccttcct       840
tttttgttaa tgtgctttta tttattaaaa aaaattacaa tgaagatgcc tgttttgtct       900
ctactgtgta ctctgatcgt atctttccaa agtgcagact cttgtgaagt tttcttaaat       960
tgttcacttt aaagaaaatg acgtaccaac aatgatttgg cttttatatt actgtaagat      1020
gttataatgt taatgtggat gtagtgcttt tactttacag attgattgga ataagattat      1080
tgcatatgaa tttacccaca ggactctgaa tcatgttacc cactcccctc acaatgttgt      1140
ccacttagtg agttgcattg atctctatccgt accaaatgat gttgaataat tacatatctt     1200
tctkgactat actgatttct tattttggtc actattacta aatctctgtt aatattctct      1260
cttttaactg aaaaaggg atg ggatagaagg gtttgcaatg ccatattatt ggtggagggc      1320
tgttttaaca tctttgaagt atggcttgct gaatatcttt accaacatct tgaatatata      1380
ttctagtgtc cacaagattt agcaaaaaga taaagcttgg gtggaatatc attttaaaat      1440
gttcatgttc tgttctatat tttcttcacc tactctccaa atattgtaat gcaaaaagtc      1500
tcagtaatga tttggtagta ttaattttgt ggtcattgtt tctcttcgat aaatttattt     1560
tcattaaata cttrttagag ggttttgaaa tgttttttcaa atatgtgaaa tgtgaaactg      1620
ctgtcttttta tattaaagta attaaagaaa atgtattgtg attgaaatta ttttgncctc     1680
cacaagatgg ctcatatgagt attcttccag ggattctaat atttatttaa g              1731


<210> 278
<211> 1320
<212> DNA
<213> Homo sapiens
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<220>
<221> SITE
<222> (743)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1275)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1303)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1316)
<223> n equals a,t,g, or c

<400> 278
 ctgcttagga agagaaggtc agagttcgcg ggggcagagg cattcttgcc gctggcccag       60
 tcactatgta gtggaggggc agacaccctc ccgcaaattc tggaagggtc ttagtctcga      120
 ctagggcagt agcccaggac tcctagtcgc cggcttcagg tcactgccgg ctgaacggag      180
 ctgccgtcgc catgtttggc tgcttggtgg cggggaggct ggtgcaaaca gctgcacagc      240
 aagtggcaga ggataaattt gttttttgact tacctgatta tgaaagtatc aaccatgttg      300
 tggtttttat gctgggaaca atcccatttc ctgagggaat gggaggatct gtctacttt       360
 cttatcctga ttcaaatgga atgccagtat ggmaactcct aggatttgtc acgaatggga      420
 agccaagtgc catcttcaaa atttcaggtc ttaaatctgg agaaggaagc caacatcctt      480
 ttggagccat gaatattgtc cgaactccat ctgttgctca gattggaatt tcagtggaat      540
 tattagacag tatggctcag cagactcctg taggtaatgc tgctgtatcc tcagttgact      600
 cattcactca gttcacacaa aagatgttgg acaatttcta caatttttgct tcatcatttg      660
 ctgtctctca ggcccagatg acaccaagcc catctgaaat gttcattccg gcaaatgtgg      720
 ttctgcaaat ggtatgaggc atnttctgtc tccaatatta aggcttttta taactgaata      780
 tctattttgt ctatgaatat attccttttt tgacatttaa acatattctt ttattgtgaa      840
 catcagcact gcatgccatt aaagtatgta ctatagagat ctgatgagaa acagttctta      900
 ccctaaatat tttgttatat tgtcgccatt atgaatttat aaagacagga aaatatagtt      960
 gcctatgttt tagggaccac tattaaagct tataaatatt tgtgtatttt catttagaag     1020
 taccatctat gagagtagtt tatactgcac tgtgtacatg aatggctaat gaatctattt     1080
 tccaactttc ccgtgtttta tagatatttc ttttcacttt gagtatccta gagatgggag     1140
 gatgcctagg aagagtttgt tgagaagtgg taccatggtg tagcatggga gagcattggg     1200
 aatgcactag gtttgaattt ggcataatgg tagctatgtg accctgagca aatttctctc     1260
 atctgctcat ctgangaatg aggaaatagg agtgaatttg atntttccta ggtccntcta     1320
```

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<210> 279
<211> 515
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (465)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (467)
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<223> n equals a,t,g, or c

<400> 279
ccctggagag gggctgctgt gccagcttgg ggagggtctg ggatggggct gcccctgatg       60
gccctgagtg ggagtacctt gccagcatct gctggggtga actttatttt agcccttccc      120
ttgttgytct tatgaagaac agaggagggg tgggcaggtc agtgatgtca gcagtgagta      180
ttccagcac agcggctctg gaagaggcat gaggcatttc tttcaggaaa tgrtcattat      240
tcagccagaa ggcattcatt aagtaagtcc tgacttgtg cccagctctg tgttataggc      300
ccttggcgag actcaggagg ggcaraggac gctagkttkt agwtaacacg gaacctcara      360
ggwtatatgg tccaagaaga cccgggggcg gtgaaaaccc tgtggactaa tgctcacggg      420
agcccgaggt cacactttga ctttgctacc atgggctgtg tctangnacg tatatatgct      480
gcgtaattat tacagaggca gtccatgtgc attgt                                 515


<210> 280
<211> 2995
<212> DNA
<213> Homo sapiens

<400> 280
tgacacccat aaggaattca tgaagaaagt agaagaaaag cgagtggacg ttaactcagc       60
agtagccatg ggagaagtca tcctggctgt ctgccacccc gattgcatca caaccatcaa      120
acactggatc accatcatcc gagctcgctt cgaggaggtc ctgacatggg ctaagcagca      180
ccagcagcgt cttgaaacgg ccttgtcaga actggtggct aatgctgagc tcctggaaga      240
acttctggca tggatccagt gggctgagac caccctcatt cagcgggatc aggagccaat      300
cccgcagaac attgaccgag ttaaagccct tatcgctgag catcagacat ttatggagga      360
gatgactcgc aaacagcctg acgtggaccg ggtcaccaag acatacaaaa ggaaaaacat      420
agagcctact cacgcgcctt tcatagagaa atcccgcagc ggaggcagga aatccctaag      480
tcagccaacc cctcctccca tgccaatcct ttcacagtct gaagcaaaaa cccacggat      540
caaccagctt tctgcccgct ggcagcaggt gtggctgtta gcactggagc ggcaaaggaa      600
actgaatgat gccttggatc ggctggagga gttgaaagaa tttgctcaact ttgactttga      660
tgtctggagg aaaaagtata tgcgttggat gaatcacaaa aagtctcgag tgatggattt      720
cttccggcgc attgataagg accaggatgg gaagataaca cgtcaggagt ttatcgatgg      780
cattttagca tccaagttcc ccaccaccaa gttagagatg actggtggtc ctgcactttt      840
cgaccgagat ggggatggtt acattgatta ttatgaattt gtggctgctc ttcatcccaa      900
caaggatgcg tatcgaccaa caaccgatcg agataaaatc gaagatgagg ttacaagaca      960
agtggctcag tgcaaatgtg caaaaaggtt tcaggtggag cagatcggag agaataaata     1020
ccggttcttc ctcggcaatc agtttgggga ttctcagcag ttgcggctgg tccgtattct     1080
gcgcaaccgt gatggttcgc gttggtggag gatggatgagc cttggatgaa tttttagtga     1140
aaaatgatcc ctgccgagca cgaggtagaa ctaacattga acttagagag aaattcatcc     1200
taccagaggg agcatcccag ggaatgaccc ccttccgctc acggggtcga aggtccaaac     1260
catcttcccg ggcagcttcc cctactcgtt ccagctccag tgctagtcag agtaaccaca     1320
gctgtacatc catgccatct tctccagcca ccccagccag tggaaccaag gttatcccat     1380
catcaggtag caagttgaaa cgaccaacac caactttca ttctagtcgg acatcccttg     1440
ctggtgatac cagcaattag ttcttccccg gcctccacag gttgccacaa taatcgggca     1500
gaccctaaaa agtctgccag tcgccctggg agtcgggctg ggagtcgagc cgggagtcga     1560
gccagcagcc ggcgaggaag tgacgttct gacttgacc tcttagagac gcattgcttg     1620
ttccgacact tcagaaagca gcgctgcagg gggccaaggc aactccagga gagggctaaa     1680
caaacttcc aaaatcccaa ccatgtctaa gaagaccacc actgcctccc ccaggactcc     1740
aggtcccaag cgataacact gtctaagcac ccccaagcca ctatccactt tgaatcctgc     1800
tccatacatt gggtgtatat ttattctgaa cgggagaagt tatattgtta aaagtgtaaa     1860
agaataattg tgttatgaag ctgccttatt tttttttcttt ttgtaagtta ctattttcat     1920
gtgaatattt atgtagataa aatttgcctc ctggtaaccc tgtaatggat ggggcccaga     1980
aatgaaatat ttgagaaaaa caagtgaaaa ggtcaagata caaatgtgta ttaaaaaaaa     2040
aaaagcctat taatagggtt tctgcgcggt gcagggttgt aaacctgctt tatcttttag     2100
gattattcct aaatgcatct tctttataaa cttgacttgc tatctcagca agataaaatta     2160
tattaaaaaa ataagaatcc tgcagtgttt aaggaactct ttttttgtaa atcacggaca     2220
cctcaattag caagaactga gggagggct ttttccattg tttaatgttt tgtgattttt     2280
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agctaaagag agggaacctc atctaagtaa catttgcaca tggatacagc aaaaggagtt   2340
cattgcaata ctgtctttgg atattgtttc agtactgggt gtttaaagga caaatagctg   2400
ctagaattca ggggtaaatg taagtgttca gaaaacgtca gaacatttgg ggttttaaac   2460
tgatttgttg ctccctatcc agcctagaca ccagtaactc ttgtgttcac caggacccag   2520
acccttggca agggataggc tcgttggtga cattgtgaat ttcagatttg ttttatccac   2580
tttttttgct atttatttaa atggtcgatc aaactcccac aaactgagga atgaattcca   2640
cgagcctgtt ctgaaaatgt ggacgtaaga caaacacgtg ctcgtccttt aatggagttc   2700
accagcacac ttgttaacca gtcctgtttg ctttcgtctt ttttgtgcg taataaagtc   2760
aactgaccaa gtgaccatga aaagggggctg tctgtgggctc ctgttttta gctgctgttc   2820
ttcagctccg accatgttgc tgtgtgatta tctcaattgg ttttaattga ggcagaaact   2880
gaagctctac caatgaactg tttagaaaca agacacactt ttgtattaaa attgcttgca   2940
gtaacaaaaa aaaaaaaaa aaaaaaaaa aaaaaactcg aggggggccc ggtac         2995
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<210> 281
<211> 1990
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> n equals a,t,g, or c

<400> 281
gggaccgcg cgsctcccgg ggatggtgag caaggcgctg ctgcnwcgtg tctgccgtca         60
accgcagagg atgaagctgc tgctgggcat cgccttgctg gcctacgtcg cctctgtttg        120
gggcaacttc gttaatatga ggtctatcca ggaaaatggt gaactaaaaa ttgaaagcaa        180
gattgaagag atggttgaac cactaagaga gaaaatcaga gatttagaaa aaagctttac        240
ccagaaatac ccaccagtaa agtttttatc agaaaaggat cggaaaagaa ttttgawtaa        300
caggaggcgc agkgttcgtg ggctccatc tkaactgaca aactcatgat ggacggccac        360
gaggtgaccg tggtggacaa tttcttcacg ggcaggaaga gaaacgtgga gcactggatc        420
ggacatgaga acttcgagtt gattaaccac gacgtgtggg agccctctca catcgaggtt        480
gaccagatat accatctggc atctccagcc tccctccaa actacatgta taatcctatc        540
aagacattaa agaccaatac gattgggaca ttaaacatgt tggggctggc aaaacgagtc        600
ggtgcccgtc tgctcctggc ctccacatcg gaggtgtatg gagatcctga agtccaccct        660
caaagtgagg attactgggg ccacgtgaat ccaatactgg ctcgggcctg ctacgatgaa        720
ggcaaacgtg ttgcagagac catgtgctat gcctacatga agcaggaagg cgtggaagtg        780
cgagtggcca gaatcttcaa cacctttggg ccacgcatgc acatgaacga tgggcgagta        840
gtcagcaact tcatcctgca ggcgctccag ggggagccac tcacggtata cggatccggg        900
tctcagacaa gggcgttcca gtacgtcagc gatctagtga atggcctcgt ggctctcatg        960
aacagcaacg tcagcagccc ggtcaacctg gggaacccag aagaacacac aatcctagaa       1020
tttgctcagt taattaaaaa ccttgttggt agcggaagtg aaattcagtt tctctccgaa       1080
gcccaggatg acccacagaa aagaaaacca gacatcaaaa aagcaaagct gatgctgggg       1140
tgggagcccg tggtcccgct ggaggaaggt ttaaacaaag caattcacta cttccgtaaa       1200
gaactcgagt accaggcaaa taatcagtac atccccaaac caaagcctgc cagaataaag       1260
aaaggacgga ctcgccacag ctgaactcct cactttagg acacaagact accattgtac       1320
acttgatggg atgtattttt ggctttttt tgttgtcgtt taaagaaaga ctttaacagg       1380
tgtcatgaag aacaaactgg aattcattc tgaagcttgc tttaatgaaa tggatgtgcc       1440
taaaagctcc cctcaaaaa ctgcagattt tgccttgcac tttttgaatc tctctttta       1500
tgtaaaatag cgtagatgca tctctgcgta ttttcaagtt tttttatctt gctgtgagag       1560
catatgttgt gactgtcgtt gacagttta tttactggtt tctttgtgaa gctgaaaagg       1620
aacattaagc gggacaaaaa atgccgattt tatttataaa agtggggtact taataaatga       1680
gtcgttatac tatgcataaa gaaaaayct agcagtattg tcaggtggtg gtgcgcccggc       1740
attgatttta gggcagataa aagaattctg tgtgagagct ttatgtttct cttttaattc       1800
agagttttc caaggtctac ttttgagttg caaacttgac tttgaaatat tcctgtttggt       1860
catgatcaag gatatttgaa atcactactg tgttttgctg cgtatctggg gcgggggcag       1920
gttggggggc acaaagttaa catattcttg gttaaccatg gttaaaatatg ctattttaat       1980
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  aaaatattga                                                              1990


<210> 282
<211> 2436
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (36)
<223> n equals a,t,g, or c

<400> 282
 aacttcgctt agctctccag ggtnaaacgg gtgagncctt aaaaacagaa gagaacaaga       60
 tttaaagtcc gttgcattga aaataacaaa caatatcaat gttttaatca aggatctctt      120
 ccacattcct ccttcttata agagcacagt aacactatcc tggaaacctg tacaaaaggt      180
 tgagattggg caaaagagag ccagtgaaga tacaacttca ggttcaccac ccaagaaatc      240
 ttcagcagga ccaaaaagag atgccaggca gatttataac cctcccagtg ggaaatatag      300
 cagcaatttg ggcaacttta attatgagca gagaggagcc ttcaggggaa gtagaggtgg      360
 ccgaggttgg ggcacacgag gaaatcgtag tcgggagaa ctctactgaa taagacatca      420
 gcattcttca gcattgtcat gagcttaata tacttaaatt ctactactca ttggattgcc      480
 ggggatgtcc ctttaaacag actgctgcct tcagctaaaa acttaatgtt ctttatacct      540
 ttgtatgtat gacctacttt tgtaacagac catggttgtg tccaaggtaa aaccacagtg      600
 atattttggg atgctttgtc tgcaatcttg acttgttttt gcagtatcat tattcagact      660
 tcaaattgtg aatcttttaa acatcttgat aatttgttgt tgagagctgt tcattctaaa      720
 atgtaatgaa attcagtcta gttctgctga taaagatcat cagtttgaa aggttactga      780
 ttttcctctt ccctcttagt tttttaccca atatatggag aagagtaatg gtcaatctta      840
 acattttgtt ttaatttgtt aataaagctg ctgggcagtg gtgcagcatt cctacctagt      900
 gtcataaaag caaaatactt acatagcttt cttaaaatat aggaatgaca ttacattttt      960
 aggagaaagt aagttgcttt gcaccgccta cttaattctt ttccatatat tgtgatacaa     1020
 acttttgaat atggaatctt actatttgaa tagaaatgtg tatgtataat atacatacat     1080
 acataagcat atatgtgtgt gtgtgtgtgt atatatatat atatgcatgc tgtgaaactt     1140
 gactacacaa cataaatcac tttttaaatt ccaggaacgg gtagtctgac acggtgatta     1200
 tccttttgag gctgaatccg ttattaactt gttatttagg tttttactcc cagtagcaag     1260
 ggattctaag ttagttgcac ttacatgatt atctgttattt aaaactaaga ataaaggctg     1320
 cattttcaaa gataaattgg aattgctgtt ggtgaaataa caaccaaaat actgaatctg     1380
 atgtacatac aggtttctac aggaagagat ggtataattt acaatttgga gatttaataa     1440
 ccaggagctac ccagaaaaag tgacttgata acatggtacc aataagtaag ggatgctctc     1500
 tcggtttgct tttgccactt tcaagatttt aacttctcag gttattaatc aaaattattg     1560
 tataagttag ccaatagaat ttttaggtta aaacaacaga tgggggggttt gtggagtgtt     1620
 taatgtcatg ggcattttta gtagcataga ccctttgttc tgcatttgaa tgtttcgtat     1680
 attttttgttt cacagttaat cttccctccc caagtttgct attcaaatca actgcctgaa     1740
 tgacatttct agtagtctga tgtattttttc tgaggaatag tttgtgattc caatgcaggt     1800
 gtcttcatta ccattacctc tacactgcag aagaagcaaa actcctttat tagaattact     1860
 gcacatgtgt atggggaaaa tagttctgaa aggctagaat gatacaagtg agcaaaagtt     1920
 ggtcagcttg gctatggagt ggtggcaata atctctaaac attccaaaag accatgagct     1980
 gaacctaaac tcccttggaa tctgaacaaa ggaatataaa attgccattt gaaaactgac     2040
 cagctaatct ggacctcaga gatagatcag ccagtggccc aaagccattt caagtacaga     2100
 aattatagag actacagcta aataaatttg aacattaaat ataattttac cacttttttgt     2160
 ctttataagc atatttgtaa actcagaact gagcagaagt gactttactt tctcaagttt     2220
 gatactgagt tgactgttcc cttatccctc accctcccc ttccctttcc taaggcaata     2280
 gtgcacaact taggttattt ttgcttccga atttgaatga aaaacttaat gccatggatt     2340
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    ttttttttt gcaagacacc tgtttatcat cttgtttaaa tgtaaatgtc cccttatgct         2400
    tttgaaataa atttcctttt gtaatttttaa aaaaaa                                  2436


<210> 283
<211> 782
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (228)
<223> n equals a,t,g, or c

<400> 283
  gccactgact tctcccaccc ttctgtctcc cccataatag tttatttggt tggtctggac           60
  tcacttgtgg cctttratta aattcctaag gggcctgaag aagacatttc tactgcagag          120
  ggttagaggc acttgagcaa ggcccccaca tcccaactct gggagttgtg gtgggaggag          180
  gcacttctgg gggataggac cagacaagat aacaggagct cacatggnaa gcagaagctg          240
  tgacaagttt agtagtccca aaatgggtta tatcccttcc ccctttacat cagaatcttg          300
  tgaaatggga aaacaacaga aggaggggat caaagatagc tgatctcaca tgcttcccag          360
  gcagggcara ggtgggagtc aaacccgggt gacaggtggg tggagagccc tgtttgaggt          420
  tgtggctgat ccctctctgg tattagtttt tcccctggga gcaggaagcc ctaggaagag          480
  gggactgcag ggtccccrgg ggatcttttc tccctcccct gcatgaggca gaggcaagct          540
  gcctgccaac cccctccctc aaggaatggc cttgcccagg aatgcccacc acacataccc          600
  tcttctttttt ttctagtcaa actcttgttt attccttggc ttgcctccct ccttcctccc          660
  ctctcaacct ttacttctga tttctatttc atggaatttg ggattgaagt taaactacaa          720
  cagtgccgcc aacaccaagt cttgcaggaa aaaaatacaa agaaatttaa caaaaaaaaa          780
  aa                                                                          782


<210> 284
<211> 961
<212> DNA
<213> Homo sapiens

<400> 284
  gagttccggc tggagacccg tgctctgggc cggcgccttc accatggcct cggcagagct           60
  ggactacacc atcgagatcc cggatcagcc ctgctggagc cagaagaaca gccccagccc          120
  aggtgggaag gaggcagaaa ctcggcagcc tgtggtgatt ctyttgggct ggggtggctg          180
  caaggacaag aaccttgcca agtacagtgc catctaccac aaaaggggct gcatcgtaat          240
  ccgatacaca gccccgtggc acatggtctt cttctccgag tcactgggta tcccttcact          300
  tcgtgttttg gcccagaagc tgctcgagct gctctttgat tatgagattg agaaggagcc          360
  cctgctcttc catgtcttca gcaacggtgg cgtcatgctg taccgctacg tgctggagct          420
  cctgcagacc cgtcgcttct gccgcctgcg tgtggtgggc accatctttg acagccgggc          480
  tggtgacagc aacctggtag gggctctgcg ggcctggca ccgtcctgg agcgccgggc          540
  cgccatgctg cgcctgttgc tgctggtggc ctttgccctg gtggtcgtcc tgttccacgt          600
  cctgcttgct cccatcacag ccctcttcca cacccacttc tatgacaggc tacaggacgc          660
  gggctctcgc tggcccgagc tctacctcta ytcgagggct gacgaagtag tcctggccag          720
  agacatagaa cgcatggtgg aggcacgcct ggcacgccgg gtcctggcgc gttctgtgga          780
  tttcgtgtca tctgcacacg tcagccacct ccgtgactac cctacttact acacaagcct          840
  ctgtgtcgac ttcatgcgca actgcgtccg ctgctgaggc cattgctcca tctcamctct          900
  gctccagaaa taaatgcctg acamctcccc acaaaaaaaa aaaaaaaaa actcgaggg           960
  g                                                                          961


<210> 285
<211> 1228
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<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1224)
<223> n equals a,t,g, or c

<400> 285
  cgcgctttgc agttcggtct cctggtgtac ggccaacgcc aagtagggga ttgcgttccc        60
  tccagtcgca gccctatcag atttggatat gtccttcata tttgattgga tttacagtgg       120
  tttcagcagt gtgctacagt ttttaggatt atataagaaa actggtaaac tggtatttct       180
  tggattggat aatgcaggaa aaacaacatt gctacacatg ctaaaagatg acagacttgg       240
  acaacatgtc ccaacattac atcccacttc cgaagaactg accattgctg gcatgacgtt       300
  tacaactttt gatctgggtg gacatgttca agctcgaaga gtgtggaaaa actaccttcc       360
  tgctatcaat ggcattgtat ttctggtgga ttgtgcagac cacgaaaggc tgttagagtc       420
  aaaagaagaa cttgattcac taatgacaga tgaaaccatt gctaatgtgc ctatactgat       480
  tcttgggaat aagatcgaca gacctgaagc catcagtgaa gagaggttgc gagagatgtt       540
  tggtttatat ggtcagacaa caggaaaggg gagtatatct ctgaaagaac tgaatgcccg       600
  acccttagaa gttttcatgt gtagtgtgct caaaagacaa ggttacggag aaggcttccg       660
  ctggatggca cagtacattg attaacacaa actcacattg gttccaggtc tcaacgttca       720
  ggcttactca gagatttgat tgctcaacat gcataacttg aattcaatag acttttgctg       780
  gttataaaac agatgttttt tagattatta atattaaatc aacttaattt gaatgagaat       840
  tgaaaactga ttcaagtaag tttgagtatc acaatgttag ctttctaatt ccataaaagt       900
  acttggtttt tacagtttat aatctgacat caccccagcg ccatttgtaa agagcaactt       960
  tccagcagta catttgaagc actttttaac aacatgaaac tataaaccat atttaaaagc      1020
  tcatcatgtt aaatttttta tgtacttttc tggaactagt ttttaaattt tagattatat      1080
  gtccacctat cktaagtgta cagttaataa ttagcttatt caatgattgc atgatgcctt      1140
  acagtttttca ataacttttt ttcttatgca aacgtcatgc aataaaacaa actctaatgt      1200
  ttggcaaaaa aaaaaaaaaa aaantcga                                        1228


<210> 286
<211> 1327
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (791)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (878)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (924)
<223> n equals a,t,g, or c

<400> 286
  tctcgggtct cgggacaggt gagcaccctg atgaaggcca cggtcctgat gcggcacctg        60
  ggcgggtgca ggagatccgtg ggcgccctcc gcaaggacgcg cggagaccgg ttacaggtga       120
  tttctgattt tracatgacc ttgagcaggt ttgcatataa tggaaagcga tgcccttctt       180
  cttacaatat tctggataat agcaagatca tcagtgagga gtgtcggaaa gagctcacag       240
  cgctccttca ccactattac ccaattgaga tcgacccaca ccggaccgtc aaggagaagc       300
```

```
tacctcatat ggtggaatgg tggaccaaag cgcacaatct cctatgtcag cagaagattc      360
agaagtttca gatagcccag gtggttagag agtccaatgc aatgctcagg gagggatata      420
agaccttctt caacacactc taccataaca acattccct tttcatcttt tctgcgggca        480
ttggtgatat cctggaagaa attatccgac agatgaaagt gttccacccc aacatccaca      540
tcgtgtctaa ctacatggat tttaatgaag atggtttct ccagggattt aagggcgagc        600
tgatacacac atacaacaag aacagctctg tgtgtgagaa ctgtggttac ttccagcaac      660
ttgagggcaa aaccaatgtc atcctgctgg gagactctat cgggggacctc accatggccg      720
atggggttcc tggtgtgcag aacattctca aaattggctt cctgaatgac aaggtggagg      780
agcggcggga ncgctaactat ggactcctat gacatcgtgc tggagaagga cgagactctg      840
gatgtggtca acgggctact ccagcacatc ctgtgccnag ggggtccagc tggagatgca      900
aggccctga aggcgcaggc tccnaagkcc sctgcaggcc gtggtgagga ggggcgcctc        960
cccagagtct gctcccccgt gaacacagag cagagccagg gtggccagca gtggctgggt     1020
ccttccgcgc ccctccgtcc tcctttccct gagcaccttc atcaccagag gcttgaagga     1080
accccgccat gtggcagggc acaggcactg ctcttggtga accttggacc acagcatgtc     1140
agtgctctag ggattgtcta ctccagggat tttcttcaaa attttaaac atgggaagtt       1200
caaacaaata taatgtgtga aacagatcaa aattttaaa atgaaaaaaa agctgctctg      1260
attcggggaa tgtgggtcgg ggtagaacct ggacctcttg gctctggggggc acatgggatg   1320
cttctag                                                               1327


<210> 287
<211> 1847
<212> DNA
<213> Homo sapiens

<400> 287
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tcggccccgc ggagccagac gctgccccg gcgcggggag aagatggtgc cgagcggcct      120
cgggcccgcc acgcgccgcc acgagtgagc ccagcgcgac cgcggggcgtc cgccgagcag     180
ctggccccga tgggcccggg gcgcgcactg ccaggggccg cggggtggag ctgatcagaa      240
taatgttcag catcaacccc ctggagaacc tgaaggtgta catcagcagt cggcctcccc       300
tggtggtctt catgatcagc gtaaggccca tggccatagc tttcctgacc ctgggctact      360
tcttcaaaat caaggagatt aaatccccag aaatggccag ggattggaat acttttctgc     420
tacggttcaa tgatttggac ttgtgtgtat cagagaatga aaccctcaag catctcacaa      480
acgacaccac aactccggaa agtacaatga ccagcgggca ggcccgagct tccacccagt     540
cccccaggc cctggaggac tcgggcccgg tgaatatctc agtccytcaat caccctaacc       600
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catcttaggg catcagattg gactttcagg cagggaagcc cacgaggaga taaacatcac      720
cttcaccctg cctacacgt ggagctcaga tgactgcgcc ttacatggcc actgtggacca     780
ggtggtattc acagcctgca tgacctcac ggccagccct ggggtgttcc ccgtcactgt        840
acagccaccg cactgtgttc ctgacacgta caggacgctgg gatggggtag acaagatctt       900
cacaactggc cagagatgcc aacacaaat acgcccaaga ttacaatcct ttctggtgtt        960
ataaggggc cattgggaaa agtctatcat gcttttaaatc cccaagcttt acagtgattg     1020
ttccagatga atgaccgttc attaataaat ttgcatctca tgcacaccag ttacttcctc     1080
tttgtgaatg gtgataacaa tgttttgcta tgctgtttat caagggcaga cctagcaaat     1140
tgcgtcagag caatcctgaa ttttgtcccg agaagtggc tttggctgaa gcctaattcc       1200
acagctcctt gttttttgag agagactgag agaaccataa tccttgcctg ctgaacccag     1260
cctgggcctg gatgctctgt gaatacatta tgtgggttatt ttgggtttatt ccagccaaag   1320
acatttcaag tgcctgtaac tgatttgtac atatttataa aaatctattc agaaattggt     1380
ccaataatgc cgtgctttgc cctgggtaca gcagagccc ttcaacccca ccttggactt      1440
gaggacctac ctgatgggac gtttcacgt gtctctagag aaggattcct ggatctagct        1500
ggtcacgacg atgttttcac caaggtcaca ggagcattgc gtcgctgatg gggttgaagt     1560
ttggtttggt tcttgtttca gcccaatatg tagagaacat ttgaaacagt ctgcacctt       1620
gatacggtat tgcattccca aagccaccaa tccattttgt ggattttatg tgtctgtggc     1680
ttaataatca tagtaacaac aataatacct tttctcat tttgcttgca ggaacatac        1740
cttaagtttt ttttgttttg tttttgtttt tttgttttt gttttcctt atgaagaaaa       1800
aataaaatag tcacattta atactactca aaaaaaaaaa aaaaaa                      1847
```

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<210> 288
<211> 799
<212> DNA
<213> Homo sapiens

<400> 288
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 ggcttggct gaagcctaat tccacagctc cttgtttttt gagagagact gagagaacca      180
 taatccttgc ctgctgaacc cagcctgggc ctggatgctc tgtgaataca ttatcttgcg      240
 atgttgggtt attccagcca aagacatttc aagtgcctgt aactgatttg tacatattta      300
 taaaaatcta ttcagaaatt ggtccaataa tgcacgtgct ttgccctggg tacagccaga      360
 gccctcaac cccaccttgg acttgaggac ctacctgatg ggacgtttcc acgtgtctct       420
 agagaaggat tcctggatct agctggtcac gacgatgttt tcaccaaggt cacaggagca      480
 ttgcgtcgct gatgggggttg aagtttggtt tggttccttgt ttcagcccaa tatgtagaga     540
 acatttgaaa cagtctgcac ctttgatacg gtattgcatt tccaaagcca ccaatccatt       600
 ttgtggattt tatgtgtctg tggcttaata atcatagtaa caacaataat accttttct        660
 ccattttgct tgcaggaaac atacctaag tttttttgt tttgtttttg tttttttgtt         720
 ttttgttttc ctttatgaag aaaaaataaa atagtcacat ttttaatacy aaaaaatgga       780
 caaaaaaagt cgaggggggg                                                    799


<210> 289
<211> 2196
<212> DNA
<213> Homo sapiens

<400> 289
 aaagactcta acatccatga gcttgaacat gagcaagagc ctacttgtgc cksccagatg       60
 gctgagccct tccgtacctt ccgagatgga tgggtctcct actacaacca gcctgtgttt      120
 ctggctggca tggtcttgc tttccttat atgactgtcc tgggcttga ctgcatcacc         180
 acagggtacg cctacactca gggactgagt ggtccatcc tcagtatttt gatgggagca       240
 tcagctataa ctggaataat gggaactgta gcttttactt ggctacgtcg aaaatgtggt      300
 ttggttcgga caggtctgat ctcaggattg gcacagcttt cctgtttgat cttgtgtgtg     360
 atctctgtat tcatgcctgg aagcccctg gacttgtccg tttctccttt tgaagatatc       420
 cgatcaaggt tcattcaagg agagtcaatt acacctacca agatacctga aattacaact       480
 gaaatataca tgtctaatgg gtctaattct gctaatattg tcccggagac aagtcctgaa       540
 tctgtgccca taatctctgt cagtctgctg tttgcaggcg tcattgctgc tagaatcggt       600
 cttggtcct ttgatttaac tgtgacacag ttgctgcaag aaaatgtaat tgaatctgaa        660
 agaggcatta taaatggtgt acagaactcc ttcttgatct tctcttctg tctgcattc         720
 atcatggtca tcctggctcc aaatcctgaa gcttttggct tgctcgtatt gatttcagtc      780
 tcctttgtgg caatgggcca cattatgtat ttccgatttg cccaaaatac tctgggaaac      840
 aagctctttg cttgcggtcc tgatgcaaaa gaagttagga aggaaaatca agcaaataca       900
 tctgttgttt gagacagttt aactgttgct atcctgttac tagattatat agagcacatg      960
 tgcttatttt gtactgcaga attccaataa atggctgggt gttttgctct gtttttacca     1020
 cagctgtgcc ttgagaacta aaagctgttt aggaaaccta agtcagcaga aattaactga     1080
 ttaatttccc ttatgttgag gcatggaaaa aaaattggaa aagaaaaact cagtttaaat      1140
 acggagacta taatgataac actgaattcc cctatttctc atgagtagat acaatcttac      1200
 gtaaaagagt ggttagtcac gtgaattcag ttatcatttg acagattctt atctgtacta      1260
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 tttttgcatc ttagttattt ttaaaaacaa attcttcaag tatgaagact aaattttgat      1380
 aactaatatt atccttattg atcctattga tcttaaggta tttacatgta tgtggaaaaa      1440
 caaaacatt aactagaatt ctctaataag gtttatggtt tagcttaaag agcaccttg       1500
 tattttatt atcagatggg gcaacatatt gtatgaagca tatgtagcac ttcacagcat      1560
 ggttatcatg taagctgcag gtagaagcaa agctgtaaag tagatttatc acacaatgac      1620
 tgcatacaga cttcaaatat gtcaatagtt tggtcatga acctagaagc caaaagccac       1680
 acagaagggc aagaatccca atttaactca tgttatcatc attagtgatc tgtgttgtag      1740
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aacatgaggg tgtaagcctt cagcctggca agttacatgt agaaagccca cacttgtgaa    1800
ggttttgttt tacaaatcac ttgatttaac acactcaggt agaatatttt tattctttact    1860
gttttatacc cagaaggttat ttctacattg ttctacagca agaataattca taaaagtatc    1920
cctttcaaat gcctttgaga agaatagaag aaaaaaagtt tgtatatatt ttaaaaaaatt    1980
gttttaaaag tcagtttgca acatgtctgt accaagatgg tactttgcct taaccgttta    2040
tatgcacttt catggagact gcaatacgtt gctatgagca ctttctttat ccttggagtt    2100
taatcctttg cttcatcttt ctacagtatg acataatgat ttgctatgtt gtaaaatctt    2160
tgtaaaaaat ttctatataa aatatttgaa acttaa                              2196
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<400> 290

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gcagttaagg cttctgataa ggaaagagag tctgaacaga gcacacacat ctggagctcc      60
aggagtgggg gatgcagcat cagattccat cttgaatttc tgctaaaata cttttgtactc    120
ataatggatc tcaacaaaga tctgtatttc atctgtggct ccatcttccc tctgggtcaa     180
gtagatgtta agctggacct tggcacgcct cttaacatga agagatctag ctagacagac     240
agactccccc atttatggga acaagaattc aatttattct ctatttataa aacattttt     300
taaagtgcct tgggtataaa aatctaaatg tctgcggtgt gatcagtcag gagcacgtaa     360
ctatcactct tcgcatcctt tggtcactgg gagatccttt gggggctggg aggtccttct     420
gtcccaggct aaaggaaaag cttcacaagg gtaagagcca cagaaccctc ggcaagaaag     480
gccggtcagg gagaatgaat ggtacagaga ggaaaggaag gaaaggggggt ggaacagagg    540
tagaaggcaa ggaagggatg ccgcactgga gaccgatggg gacactctaa ttgtgcaaga     600
gggaggatct tccttcttga atgctgaaca cagctagtct gaaccttcct tggaaagtcc     660
agctgtttgc ccatgcatag ggccaactct ccctgcaaag cagcaaatgt ggcttctatc     720
aggaaggaaa agtatccatc agtgtgacaa gaggtcacct tcgaacttgc atgaactcct     780
tgcgcagcca caaagagtcc tggtagaagt gaggatcgcc tagtcttacg gctgtccgtt     840
tatagaagta gcagtacaac actgctgcta gtctctggaa tacaaacagc atttgaagtc     900
catctgtcca tatgaagctg ttggagtttt tccagcgtaa gttcatgacc cagacatgaa     960
gggagatgct gagggcaaag tacacagctg tcaggatgat ggtcccttt g aacttatgga    1020
ataggaggtt gaccaggcca gcctggaaga cgaaggtgtt gaagaacatg aggaaaatga    1080
tgatgatgtt gaagaggact gcaatatcct ggatgcactg agggagaggg ttctagttcc    1140
tttgaatgag agctgtttcc cttgctctaa ggcaagcacc tccaa                    1185
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<400> 291

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agggaaaggg gagggtagcg ggagggtagc aggtgagttc ctagggctgg aaggtttagc      60
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aagcttggtt tgtacaaaag caaggtggga gtctatttttt gtacatgaga tacatcacac    180
ttacctgtgg gccagtattg tgaagtgagt ctgagttgtt tacactgatg ccttccctag    240
ccaccacaaa ttgtgtacat agtcttcaga tgataccacc cctttcccca gctcccaacc    300
aagagctggt tctaggcctg tgttatatgt catatttagc stttttatat atgacctttg    360
atttctgttg tttgtatttt agcacagtgt atgcaccttc atttaaaatac atctgtgtgc    420
atacagatac gcatatatgt gtgtgcgtat gcatatatct ctcatctgta gtttccaaga    480
gttcagctga agcagatgga gtcctgcagc ccaggagaca ccctgcatcc ctgctaatag    540
tgtttgccac aagtattagt gagtcttcct tattaatatt ttcatttcag aagactgaaag   600
caaagctgat agtgtttgct gtttcttttgg cagctaagtg agggtcttgg gatgacttgc    660
tgtgttcctc aagctgcact ttggggccat ctctgcagta ttagccccct tttttgcttgg    720
tggtactctg tctgtgcctg tgtgtgtgtg tgatagtcac tcttgcatgg cttccatgtc     780
tggtttgtgg cattggggga taaggtgctg aagccagagc atttgcagtt tgtttgaggc    840
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```
ctcgttgcca atgatagatc actcctgttg acctggtatg tctgcttgct tgctgctttt      900
ccttgctttc tcttggaaga ggaaaggact ctggtcaggc ccaggctgag tgagatgagc      960
tgcagctggc tcatggcctt cttagagcag agagaggagt atgtcatttt actaagttcc     1020
taaacaaaca tttatgcagg caacactcct agagaggagt gaaactgagg cacaatatggg    1080
ttatgacttg ctcaagaata tgtagctgct aggggtaaa tcaaggcatc acaatttctg      1140
ttcagcgggc aggaataggc tgtgaattgc tagcactttt tttttttaag caattactttt    1200
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aaatgatctt aattgttatt gcccacccct ggcttttccg ggtagaaaat tcacagtagg      1380
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tgagttcctg tgtgtccaaa actgaggcac catgttcttt gaaaacatgc cacctcaagg      1560
ctgggcgcgg tggctcacac ctgtaatccc agcaytttgg ggaggccsag ggcggggcgg      1620
kttcaccggg ggtc                                                        1634
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<210> 292
<211> 1795
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (445)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (454)
<223> n equals a,t,g, or c

<400> 292

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caacccctc tttgtcaacc tcaataatga gctcactgtg gaggagcagc tcgggcacag        120
ctcmccgtya tggtcattgt taccccccaa gaccgcaaaa actctgtgtg gacacaggat       180
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ccttggaca tttacgacgt gctgattcgc ctgtytcctc gccatatccc gcggcaccgc        360
aggcttgtgg actcgccagy tgcctccttc tgccggggcc tgctcagcca gccggggccc       420
tcatccctga tgcccgtgct gggtnatgat cctnctcagc tctatctgac gcagctcagg       480
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tggactgtgt gatcccagct ctggagcaag ctgtagacgg acagcaggac attggacctc       780
tagagcaaga tgtcagtagg atgacctcca ccctccttgg acatgaatcc tccatggagg      840
gcctgctggc tgaacatgct gaatcatctc caacaaaacc cagccccaac tttctctctg       900
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cagaagagga gtgggagcca gctcagagaa ggaactgaac ccaggagatc catccaccta     1020
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acagagaagg ggatgtgtgc ctgggagagg ctctgtctcc ttcctgctgc caggacctgt     1140
gcctagactt agcatgccct tcactgcagt gtcaggcctt tagatgggac ccagcgaaaa    1200
tgtgtgccctt ctgagtcaca tcaccgacac tgagcagtgg aaaggggcta tatgtgtatg    1260
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gacagtggaa aagaaccgag gacaggaaag gattgggtag gtgaaggggt caggggactg    1380
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gccctggctg tttgcccgtt catgtcacaa actgccacta ctatgtacct gcagtggggt     1500
tgcagagatg ggggagactc aagtcttact ccccaggagc tcccaggggcc caaggaggag   1560
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aatgctgcct cctttcagtc tggtctacac ccactttctg gtagcctctc tgcttcctgt    1620
aattctggct gttttccag actcagctca aatagtgccc ctccttaagc ccatccctcg    1680
cccccagcct gaggtgatct ttccctcctc tgaactatta gagcagttac tgtctggttca    1740
gttcgtttgg caggcacaca cagtggcata aattctattg ttttgaactc tgatt         1795
```

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<210> 293
<211> 858
<212> DNA
<213> Homo sapiens
```

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<400> 293
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gctctcggag gagatctcgg ctccagtttc ggagcggatg aatgccctgt tcgtgcagtt    120
tgctgaggtg ttcccgctga aggtatttgg ctaccagcca gatcccctga actaccaaat    180
agctgtgggc tttctggaac tgctggctgg gttgctgctg gtcatgggcc caccgatgct    240
gcaagagatc agtaacttgt tcttgattct gctcatgatg ggggctatct tcaccttggc    300
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gctgctgaat gtcggccagc tcttagccca gactaagaag gtgtcagac ccactaggaa    420
gaagactcta agtacattca aggaatcctg gaagtagagc atctctgtct ctttatgcca    480
tgcagctgtc acagcaggaa catggtagaa cacagagtct atcatcttgt taccagtata    540
atatccaggg tcagccagtg ttgaaagaga catttttgtct acctggcact gctttctctt    600
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aataaccact tttaatgcct tggtgtaagt atacctctga acttttttct gtgcctttaa    780
acagatatat atttttttttt aatgaaaata aaaccatata tcctattttta tttcctcctt    840
ttaaaacttt ataaacta                                                  858
```

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<210> 294
<211> 915
<212> DNA
<213> Homo sapiens
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<400> 294
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ggcttcttcg cgctcgtggg gttggccaag ctctcggagg agatctcggc tccagtttcg    120
gagcggatga atgccctgtt cgtgcagttt gctgaggtgt tcccgctgaa ggtatttggc    180
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ttgctgctgg tcatgggccc accgatgctg caagagatca gtaacttgtt cttgattctg    300
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ccagccattg tctgcctggg gttcctgctg ctgctgaatg tcggccagct cttagccag    420
actaagaagg tggtcagacc cactaggaag aagactctaa gtacattcaa ggaatcctgg    480
aagtagagca tctctgtctc tttatgccat gcagctgtca cagcaggaac atggtagaac    540
acagagtcta tcatcttgtt accagtataa tatccaggg cagccagtgt tgaaagagac    600
atttgtctca cctggcactg ctttctcttt ttagcttac tactcttttg tgaggagtac    660
atgttatgca tattaacatt cctcatgtca tatgaaaata caaaataagc agaaaagaa    720
tttaaatcaa ccaaaattct gatgccccaa ataaccactt tttaatgcct tggtgtaagta    780
tacctctgaa cttttttctg tgcctttaaa cagatatata tttttttttwa atgaaaataa    840
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aaaaaaaaaa ctcga                                                      915
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<210> 295
<211> 1517
<212> DNA
<213> Homo sapiens
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<220>
<221> SITE
<222> (35)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (55)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (794)
<223> n equals a,t,g, or c

<400> 295
  ccttgtggca actagtgggt ccccccgggct gcagnaattc gggcagtggt tctgngtctg      60
  aagatactct gagttcctct gagagatcca aaggctccgg gagcagaccc ccaaccccca     120
  aaagcagccc tcagaagacc aggaagagcc ctcaggtgac cagggtagc cctcagaaga      180
  ccagctgtag ccctcagaag accaggcaga gccctcagac gctgaagcgg agccgagtga     240
  ccacctcact tgaagctttg cccacaggac agtgctgaca gacaagagtg ggcgacagtg     300
  gaagctgaag tccttccaga ccagggacaa ccagggcatt ctctatgaag ctgcacccac     360
  ctccaccctc acctgtgact caggaccaca gaagcaaaag ttctcactca aactggatgc     420
  caaggatggg cgcttgttca atgagcagaa cttcttccag cgggccgcca agcctctgca     480
  agtcaacaag tggaagaagc tgtactcgac cccactgctg gccatcccta cctgcatggg     540
  tttcggtgtt caccaggaca aatacaggtt cttggtgtta cccagcctgg ggaggagcct     600
  tcagtcggcc ctggatgtca gcccaaagca tgtgctgtgc agagaggtct gtgctgcagg     660
  tggcctgccg gctgctggat gccctggagt tcctccatga gaatgagtat gttcatggaa     720
  atgtgacagc tgaaaaatatc tttgtgggatc cagaggacca gagtcaggtg actttggcag     780
  gctatggctt cgcnttccgc tattgcccaa gtggcaaaca cgtggcctac gtggaaggca     840
  gcaggagccy tcacgagggg gaccttgagt ttcattagca tggacctgca caagggatgc     900
  gggccctccc gccgcgygya cctccagagc ctgggytamt gcatgctgaa gtggytctam     960
  gggtttctgc catggacaaa ttgccttcca amamtgagga catcatgaag caaaaacaga    1020
  agttgccttg ggattcattt taatgtaagc tkgactttgt catgccagaa acaaggctcg    1080
  gtcaccgtca gcagtttgca gttttccacc tccwcccagt tcctccgtgt ggttgaccca    1140
  gatatctccg ttatgcagcc gcctccgggg gaccacctcc ctcccttga gtcagccaca     1200
  gacagcctac ttgacggccc cgctggcccc cacattccac tgaactgtgc ggatgccaca    1260
  gtgaccccct ctcaggcaca gcatgacctc ctgaagtcga gcctgcttgc tttgaaccta    1320
  ccagttaaaa tctcctcaaa atgtttggat accgcccatt ggcccctcac agccacgagc    1380
  tccctgacca gtgtgcgtgt gtgtgtgtgt gtgtgtctgt gtgtgtgctt gggacgggtg    1440
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  ttccaaaaaa aaaaaaa                                                    1517

<210> 296
<211> 3865
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (632)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1651)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (1826)
<223> n equals a,t,g, or c

<400> 296
  tggaggggg gagcttcctt gagcagtggg cccaggcctg gccctccaca cttcattctc        60
  tgacctttct ctctcctcat ttcggtgcat gtcctttctg cagctgcctt tcagcacagg       120
  tggttccact ggggggcagct aacgctgagt gacaaggatg ggaagccaca ggtgcatttt      180
  actcaagtct tctctagtca atgaggggca cccagtgctt ctagggcagg ctgggtggtg       240
  gtccctagg tatcagcctc tcttactgta ctctccggga atgttaacct ttctattttc        300
  agcctgtgcc acctgtctag gcaagctggc ttcccattg gccctgtggg gtccacagca        360
  gcgtggctsc ccccagggc caccgcttct tcttgatcc tctttcctta acagtgactt         420
  gggcttgagt ctggcaagga accttgcttt tagcttcacc accaaggaga gaggttgaca       480
  tgacctcccc gccccctcac caaggctggg aacagagggg atgtggtgag agccaggttc       540
  ctctggccct ctccagggtg ttttccacta gtcactactg tcttctcctt gtagctaatc       600
  aatcaatatt cttcccttgc ctgtgggcag tnggagagtg ctgctgggtg tacgctgcac       660
  ctgcccactg agttggggaa agaggataat cagtgagcac tgttctgctc agagctcctg       720
  atctacccca cccctagga tccaggactg ggtcaaagct gcatgaaacc aggccctggc        780
  agcaaccctg ggaatggctg gaggtgggag agaacctgac ttctctttcc ctctcctcc       840
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  ggacagagga caaaggagaa gggaggggtct agaaggagca gccctctctt gtcctctggg      960
  gtaaatgagc ttgacctaga gtaaatgggta agaccaaaag cctctgattt ttaatttcca      1020
  taaaatgtta gaagtatata tatacatata tatatttctt taaatttttg agtctttgat      1080
  atgtctaaaa atccattccc tctgccctga agcctgagtg agacacatga agaaaactgt      1140
  gtttcattta aagatgttaa ttaaatgatt gaaacttggc tgtggctact gcttcttaat      1200
  gttgggggga cagggcagtg gtctgggccc acatttagaa gggaaaatgt tttgctgct       1260
  gcacacattg gacccaagta tgggcctctt ctgcctagta ctgccaaagg gactgttaag      1320
  gtgtcttgtc catcttctac ccccacccc ccattacggg taaaggraac cccagactag       1380
  gtgaggggcc agcagctgcc tcacattgtg ttctctcctg agatggtcca gctcacatcc      1440
  agacaccttg ttcagacatt ttatttgaat ttatgacagt gatggggatt tgactgagat      1500
  gccttatgga gaagtacccc accctctatg aagacagaat cactctctgc cattcattct      1560
  gcctgatgct aacaacacgc agctgattta gggagtgtcc cagcctagct ggatcaaggg      1620
  aaattccagg agccctgggg caggccctgg ncccagtgc caagcctcag agtaagcaga       1680
  cattgggaaa gttgccaacc acttggtaga ccactaggtt ctctgtttc ccttcccttt      1740
  cctttcaaa tccacagtt tcctgttggg gagaagctgt aattagcctca gtccaggtac      1800
  cagatcccag ctaggggcgc agctgncttg gataactcca agaaaacctg ggcaccagta      1860
  tttttccaat tataaggact gtggcataaa tttttaaatg agttatattg aaaccagatt     1920
  tctccagctg ccaagggaag aaggtagggc tggactccct gctgtggccc agcccttgtt      1980
  aggggttggt ctctcactgc agccagacag gatgatcctg ggtctgggg agggtaagct      2040
  gcccctttgcc gagttctgca ccgaataaag agtccaaacc cgctgcttcc gtgtcctgag     2100
  agatgggtaa atgggtgatg gatggagcag actgagagaa cagcagatga ctcagtggtg      2160
  gaagaagggg ggaagatgct gggctggcta gctaatgttc ccccctttca gcgatttaca      2220
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  agaaattttg aagtcagcct gcaacttctc gaagactttc ttcttgggct tgagctcctc      2340
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  cggagggtcc agaggttcaa ctggcggttt ctggaaggca cagaagcatg cagaagcatg      2460
  ccttgggact cgactcctct catcttctgg ggtttcaggt tgcacagcac cactaccagc      2520
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  tcagcttccc ccacgtcaat cttctctaca tacaggctgt ctgcatctgg gtgcttctcc      2640
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  tcagtgcgac ttcaacagaa ttcttcaggt ctccaggatg tacaacctca gcagcaaagt      2880
  cctttccag gtccacgtaa gctgtgtagg ttttgtttcc acccattcc tcatctcgta       2940
  ggatcacaaa ctcggactta aggggaaaaa ggacatgctt gatgaaggac agaaccccat      3000
  tgttctccac atttcctggc tcacagaagg ccttcttcag tttttttcttc acatcctcct     3060
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acttctctgc aaaggtgaaa atctttctct gatcaatgcc tccaaattgg gcatctactt    3240
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ttttaagttc ccgctccttc agtatctcct tcagcttctc ttccccagaa acctcctgca    3720
ggttccgggt gataaggtgc agtttctctt cagggctggg agcgtccccc atggtccgct    3780
acccctgctt ccccgctca gcccggcacc agagcccctt cctgggtcac cgtcgccgcc    3840
gcgtgccggg aactgtcacg cgagt                                          3865
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<210> 297
<211> 1910
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (263)
<223> n equals a,t,g, or c

<400> 297
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gcgcctycca gccagcccga ctcctaggag ggaggaggc gggaaagcag ctcaagcctc    180
acccaccgcc ctgccccag ccccgccact cccaggctcc tcgggactcg gcgggtcctc    240
ctgggagtct cggaggggac cgnctgtgca gagccatgg agttggtgct ggtcttcctc    300
tgcagcctgc tggcccccat ggtcctggcc agtgcagctg aaaaggagaa ggaaatggac    360
ccttttcatt atgattacca gaccctgagg attggggac tggtgttcgc tgtggtcctc    420
ttctcggttg ggatcctcct tatcctaagt cgcaggtgca agtgcagttt caatcagaag    480
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gagccccaga agcagagaa ctgaagtgca gccatcaggt ggaagcctct ggaacctgag    600
gcggctgctt gaacctttgg atgcaaatgt cgatgcttaa gaaaaccggc cacttcagca    660
acagcccttt cccagagaga agccaagaac ttgtgtgtcc cccaccctat cccctctaac    720
accattcctc cacctgatga tgcaactaac acttgcctcc ccactgcagc ctgcggtcct    780
gcccacctcc cgtgatgtgt gtgtgtgtgt gtgtgtgtgt gactgtgtgt gtttgctaac    840
tgtggtcttt gtggctactt gtttgtggat ggtattgtgt ttgttagtga actgtggact    900
cgctttccca ggcaggggct gagccacatg gccatctgct cctccctgcc cccgtgaccc    960
tccatcacct tctgctccta ggaggctgct tgttgcccga gaccagcccc ctccctgat   1020
ttagggatgc gtagggtaag agcacgggca ttggtcttca gtcgtcttgg gacctgggaa   1080
ggtttgcagc actttgtcat cattcttcat ggactccttt cactcctta acaaaaacct   1140
tgcttcctta tcccacctga tcccagtctg aagctctctt agcaactgga gatacaaagc   1200
aaggagctgg tgagcccagc gttgacgtca ggcaggctat gcccttccgt ggttaatttc   1260
ttcccagggg cttccacgag gagtccccat ctgcccgcc ccttcacaga gcgcccgggg   1320
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caatctacg cccagctcat ccagatgcag actacagtcc ctgcaattgg gtctctggca   1500
ggcaatagtt gaaggactcc tgttccgttg gggccagcac accgggatgg atggagggag   1560
agcagagcc tttgcttctc tgcctacgtc ccccttagatg ggcagcagag gcaactcccg   1620
catcctttgc tctgcctgtc ggtggtcaga gcggtgagcg aggtggggttg gagactcagc   1680
aggctccgtg cagcccttgg gaacagtgag aggttgaaag tcataacgag agtgggaact   1740
caacccagat ccgcccctc ctgtcctctg tgttcccgcg gaaaccaacc aaaccgtgcg   1800
ctgtgaccca ttgctgttct ctgtatcgtg atctatcctc aacaacaaca gaaaaaagga   1860
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<210> 298
<211> 3276
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3220)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3264)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3265)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3269)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3270)
<223> n equals a,t,g, or c

<400> 298
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 atcaggagcc agcgttgttc gcccgacgcc tcgctgccgg tgggaggaag cgagagggaa      120
 gccgcttgcg ggtttgtcgc cgctgctcgc ccaccgcctg gaagagccga gccccggccc      180
 agtcggtcgc ttgccaccgc tcgtagccgt taccgcgggg ccgccacagc cgccggccgg      240
 gagaggcgcg cgccatggct tctggagccg attcaaaagg tgatgaccta tcaacagcca      300
 ttctcaaaca gaagaaccgt cccaatcggt taattgttga tgaagccatc aatgaggaca      360
 acagtgtggt gtccttgtcc cagcccaaga tggatgaatt gcagttgttc cgaggtgaca      420
 cagtgttgct gaaaggaaag aagagacgag aagctgtttg catcgtcctt tctgatgata      480
 cttgttctga tgagaagatt cggatgaata gagttgttcg gaataacctt cgtgtacgcc      540
 taggggatgt catcagcatc cagccatgcc ctgatgtgaa gtacggcaaa cgtatccatg      600
 tgctgcccat tgatgacaca gtggaaggca ttactggtaa tctcttcgag gtatacctta      660
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 gtgggatgcg tgctgtggag ttcaaagtgg tggaaacaga tcctagccct tattgcattg      780
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 gcaaattggc tggtgagtct gagagcaacc ttcgtaaagc cttttgaggag gctgagaaga     1140
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 ctcatgtcgca ggtggagcgg cgcattgtat cacagttgtt gaccctcatg gatgatgctaa     1260
 agcagagggc acatgtgatt gttatggcag caaccaacag acccaacagc attgacccag     1320
 ctctacggcg atttggtcgc tttgacaggg aggtagatat tggaattcct gatgctacag     1380
 gacgcttaga gattcttcag atccataccac agaacatgaa gctggcagat gatgtggacc     1440
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caacctgggt aggtgggtag gggccacagt tgccacctgt ttatatagag aagttgagag    3120
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aaaaatgaca tgttgtaaaa ggacaataaa cgttgggtcn aaatgggwra aaaaaaaaaa    3240
aaaaaagggg ggcccctcta aagnnccann cttcgt                              3276


<210> 299
<211> 1695
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1693)
<223> n equals a,t,g, or c

<400> 299
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cggaagcaac ggtcggtggg gcggagaagg gggctggccc caggaggagg aggaaaccct     180
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cggcgtcttg ccaccgggcc tgtcagttga cctaccccti gcacacctac cctaaggaag     420
aggagttgta cgcatgtcag agaggttgca aattgtttca aattgttcag tttgtggatg     480
atggaattga cttaaatcga actaaattgt aatgtgaatc tgcatgtaca gaagcatatt     540
cccaatctga tgagcaatat gcttgccatc ttggtgccac gaatcagctg ccattcgactg     600
aactgagaca agaacaactt atgtccctga tgccaaaaat gcacctactc tttcctctaa     660
ctctcggtgag gtcattctgc agtgacatga tggactccgc acagagcttc ataacctctt     720
catggacttt ttatcttcaa gccgatgacg gaaaaatagt tatattccag tctaagccag     780
aaatccagta cgcaccacat ttggagcagg agcctacaca tttgagagaa tcatctctaa     840
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gcaaaatgtc ctatctgcaa atgagaaatt cacaagcgca caggaatttt cttgaagatg        900
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aacaaaagct aaacagatat ccagcttctt ctcttgtggt tgttagatct aaaactgaag       1140
atcatgaaga agcagggcct ctacctacaa aagtgaatct tgctcattct gaaatttaag       1200
catttttctt ttaaaagaca agtgtaatag acatctaaaa ttccactcct catagagctt       1260
ttaaaatggt ttcattggat ataggcctta agaaatcact ataaaatgca aataaagtta       1320
ctcaaatctg tgaagactgt atttgctata actttattgg tattgttttt gtagtaatttt      1380
aagaggtgga tgtttgggat tgtattatta ttttactaat atctgtagct attttgtttt      1440
ttgcttttggt tattgttttt ttccttttc ttagctatga gctgatcatt gctccttctc       1500
acctcctgcc atgatactgt cagttacctt agttaacaag ctgaatattt agtagaaatg       1560
atgcttctgc tcaggaatgg cccacaaatc tgtaatttga aatttagcag gaaatgacct       1620
ttaatgacac tacattttca ggaactgaaa tcattaaaat tttatttgaa taattaaaaa       1680
aaaaaaaaaa aanct                                                        1695
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<210> 300
<211> 1501
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1125)
<223> n equals a,t,g, or c

<400> 300
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cactttcagc agtcctttgc tctctttgct tctacctcaa atagccccag gagtgggctt         60
tagtctccaa tagtggagcat ctcaagcttc tcctgggga tgggattgg gatgggcaga       120
atctgttttg gwtctccggg ttatttccag tgggtgtaaa agcagagctg ggcctttccc       180
tctcttatcc ctgagggtgg gtaagaagga ctgtatctac acctgttctt ccctaccttc       240
tcttttgtta gggaggcctc attctaagtt cctcaagaga gtccttggct taaagctgta       300
gcaagggtgt gctaggtggg ggatttggag caaaaccgtc gagtaggcat gatactggta       360
tggagtgggc ctgcaaaatc agacagaaat ggcttgagaa gccgcagggg agcatgcctg       420
tctctcagtg atagagtatg ggagggacct ccctagcttg gaaaatgaga attgaagggg       480
ttatgaacaa ataggatgcc tagttgagga tgttcccaaa gttttgtcca atcttatcat       540
tagtagattt tataagccac agagacaaac cagaaacgga ataatgttac ttttgatgct       600
ttattttttt gttctaggtg tggctttgta catgcagaag aatgctatat gctgcacatt       660
ttgccttttaa agtcttacga ctttccccat tttagtctaa tgggaagata cagatgtgca      720
agtctgcttt tttggtttttt gttattattt tttttttttt gctctgtgtt atggacattt      780
tcagacatgc acagaagtgg agaggatggt cctggaccc matgtgtcca tcacctagct        840
gcatcactta tcagctatgg tcaacctggt ttcatctgta tctctctctt ttcacctgta       900
ttgtttattg aaaatccaag acactatgcc aatgcaaccg tgactacttt gggagattgg       960
tagtctcttt tgatggtgat agtgatgggg tgcactatca taatcacatc aggtctgctt      1020
tttgcttttta atgttaacta atgaagtkcc agagatgggc cttagaaatg tgtttttaaga    1080
attaacaagg agtctcaaaa agaaatgaga gggatgcttc ctttncccttt gcatctacaa     1140
aacmagagag agactgttct gttgtaaaac tctttcaaaa attctgatat ggtaaggtac      1200
ttgaccct tcaccagaat gtcaatcttt ttttctgtgt aacatggaaa cttgtgtgac         1260
cattagcatt gttatcagct tgtactggtc tcataactct ggttttggaa gaataatttg       1320
gaaattgttg ctgtgttctg tgaaaataac ctccccaaaa taattagtaa ctggttgttc      1380
tacttggtaa tttgacaccc tgttaataac gcaattattt ctgtgttctt aaacagtata     1440
aatagttgta agtttgcatg catgatggaa aaataaaaac ctgtatctct gttaaaaaaa     1500
a                                                                      1501
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<210> 301
<211> 2683

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<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (30)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (817)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2660)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2661)
<223> n equals a,t,g, or c

<400> 301
tgantgtggt cccgggtgcn gattggcagn gcctccgccg cggctcgtgg ttgtcccgcc      60
atggcactgt cgcgggggct gccccgggag ctggctgagg cggtggccgg gggccgggtr     120
ctggtggtgg gggcgggcgg catcggctgc gagctcctca agaatctcgt gctcaccggt     180
ttctcccaca tcgacctgat tgatctggat actattgatg taagcaacct caacagacag     240
tttttgtttc aaaagaaaca tgttggaaga tcaaaggcac aggttgccaa ggaaagtgta     300
ctgcagtttt acccgaaagc taatatcgtt gcctaccatg acagcatcat gaaccctgac     360
tataatgtgg aattttccg acagtttata ctggttatga atgctttaga taacagagct     420
gcccgaaacc atgttaatga aatgtgcctg gcagctgatg ttcctcttat tgaaagtgga     480
acagctgggt atcttggaca agtaactact atcaaaaagg gtgtgaccga gtgttatgag     540
tgtcatccta agccgaccca gagaaccttt cctggctgta caattcgtaa cacaccttca     600
gaacctatac attgcatcgt ttgggcaaag tacttgttca accagttgtt tggggaagaa     660
gatgctgatc aagaagtatc tcctgacaga gctgacctg aagctgcctg ggaaccaacg     720
gaagccgaag ccagagctag agcatctaat gaagatggtg acattaaacg tatttctact     780
aaggaatggg ctaaatcaac tggatatgat ccagttnaaa cttttacca agcttttaa      840
agatgacatc aggtatctgt tgacaatgga caaactatgg cggaaaagga aacctccakt     900
tccgttggac tgggctgaag tacaaagtca aggagaagaa acgaatgcat cagatcaaca     960
gaatgaaccc cagttaggcc tgaaagacca gcagttcta gatgtaaaga gctatgcacg     1020
tcttttttca aagagcatcg agactttgag agttcattta gcagaaaagg gggatggagc     1080
tgagctcata tgggataagg atgacccatc tgcaatggat tttgtcacct ctgctgcaaa     1140
cctcaggatg catattttca gtatgaatat gaagagtaga tttgatatca aatcaatggc     1200
agggaacatt attcctgcta ttgctactac taatgcagta attgctgggt tgatagtatt     1260
ggaaggattg aagattttat caggaaaaat agaccagtgc agaacaattt ttttgaataa     1320
acaaccaaac ccaagaaaga agcttcttgt gccttgtgca ctggatcctc ccaacccaa     1380
ttgttatgta tgtgccagca agccagaggt gactgtgcgg ctgaatgtcc ataaagtgac     1440
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tgttctcacc ttacaagaca agatagtgaa agaaaaattt gctatggtag caccagatgt    1500
ccaaattgaa gatgggaaag gaacaatcct aatatcttcc gaagagggag agacggaagc    1560
taataatcac aagaagttgt cagaatttgg aattagaaat ggcagccggc ttcaagcaga    1620
tgacttcctc caggactata ctttattgat caacatcctt catagtgaag acctaggaaa    1680
ggacgttgaa tttgaagttg ttggtgatgc cccggaaaaa gtggggscca aacaagctga    1740
agatgctgcc aaaagcataa ccaatgggca gtgatgatgg agctcagccc tccacctcca    1800
cagctcaaga gcaagatgac gttctcatag ttgattcgga tgaagaagat tcttcaaata    1860
atgccgacgt catgaagaag agagaagccg caagaggaaa ttagatgaga aagagaatct    1920
cagtgcaaag aggtcacgta tagaacagaa ggaagagctt gatgatgtca tagcattaga    1980
ttgaacagaa atgcctctaa acagaaccct cttactattt agtttatctg ggcagaacca    2040
gattgttatg tcctttgttc caaagggaaa aaattgacag cagtgacttg aaaatgattc    2100
tgctcccttt gaaagcattc attttgctag aactgttaga cacattgcag tatgctgtat    2160
tgaaagtagg aatatagttt taaaaaccct ttgaacaaag tgtgtgcata accagtcatg    2220
agataaaaca acacaatgca tgttgccttt taagtgtaaa tacccttagg tatcattaat    2280
agtttcaaaa tattgtggtt tagtaaagtt gatacctggt tataaatatt atgcctttat    2340
ttttggctag aagaagaatt attttagcc tagatctaac cattttcata ctcttaactg    2400
attgaaacag attcaaagaa gtatcgagtg ctatgcattg aaactttgttt ttaaatgtta    2460
gatggcacta tgtatattaa tgtaaaacaa tgttaattta ctcaagtttt cagtttgtac    2520
cgcctggtat gtctgtgtaa gaagccaatt tttgtgtatt gttacagttt caggttattt    2580
atattcgatg ttttgtaaaa ctcaaataac gactatactt atggaccaaa taaatggcay    2640
tgcattcktg tkaaaaaaaa nacagaaaaa aaaaaaaaca aga                      2683
```

<210> 302
<211> 1454
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1454)
<223> n equals a,t,g, or c

<400> 302
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ggactcgggg tggctctaag gggcagggat agggctgggg agcgccggcc tgtggccctg     60
accagccct tctcgtgcag gttccaccccc gatgcaggtg gtcacgtgct tgacgcggga    120
cagctacctg acgcactgct tcctccagca cctcatggtc gtgctgtcct ctctggaacg    180
cacgccctcg ccggagcctg ttgacaagga cttctactcc gagtttgggga acaagaccac    240
agggaagatg gagaactacg agctgatcca ctctaagttta cctaccccag    300
tgaggaggag attgggggacc tgacgttcac tgtggcccaa aagtaggctg agccagagaa    360
ggccccagcc ctcagcatcc tgctgtacgt gcaggccttc caggtgggca tgcoacccccc    420
tgggtgctgc aggggcccc tgcgccccaa gacactcctg ctcaccagct ccgagatctt    480
cctcctggat gaggactgtg tccactacc actgcccgag tttgccaaag agccgccgca    540
gagagacagg taccggctgg acgatggccg ccgcgtccgg gacctggacc gagtgctcat    600
gggctaccag acctaccgc agccctcacc ctcgtyttcg atgacgtgca aggtcatgac    660
ctcatgggca gtgtcaccct ggaccacttt ggggaggtgc caggtggccc ggctagagcc    720
agccagggcc gtgaagtcca gtggcaggtg tttgtcccca gtgctgagag cagagagaag    780
ctcatctcgc tgttggctcg ccagtgggag gccctgtgtg gcctgagctg cctgtcgagg    840
tcaccggcta gcccaggcca cagccagcct gtcgtgtcca gcctgacgcc tactggggca    900
gggcagcagg cttttgtgtt ctctaaaaat gttttatcct ccctttggta ccttaattttg    960
actgtcctcg cagaaatgtg aacatgtgtg tgtgttgtgt taattctttc tcatgttggg   1020
agtgagaatg ccgggccct cagggctgtt cggtgtgctg tcagcctccc acaggtggta   1080
cagccgtgca caccagtgtc gtgtctgctg ttgtgggacc gttgttaaca cgtgacactg   1140
tgggtctgac tttytcttct acacgtcctt tccctgtcac ggcttttttgttg tcctttgttg   1200
ctgttgctgt tgctgttgct gttgctgttg gcatcttgct gctaatcctg aggctggtag   1260
cagaatgcac aggtgaagct cccacccat attgttctc aaagtggagg tctccctga    1320
tccagacaag tgggagagcc cgtggggggca ggggacctgg agctgccagc accaagcgtg   1380
attcctgctg cctgtattct ctattccaat aaagcagagt ttgacaccgw maaaaaaaa   1440
```

```
aaaaaaaaaa aacn                                                    1454


<210> 303
<211> 828
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (491)
<223> n equals a,t,g, or c

<400> 303
accctggcat gccccacaaa cagatcacca gccagcttac acaggcatta actctcctca        60
atgaggaaga atcattcaca actgagcaag acattcatat gatcatttaa ggaagtgttt       120
cccttatgtg ttagcaagta taatcggcta actcctaaat cccaatgaat agtcctaggc       180
tggacagcaa tgggctgcaa ttaggcagat aaagacatca gtcccagtaa atgaatccat       240
agactcatct agcaccaact accattagca ctatgttagg agctgcaagg ccccaaagta       300
gaagatgtgc ataatgtctg ctcttgtgta gctcaggaga caattccagc acagacacta       360
cagttaacgc tgaactgcag ctgcaagtaa tagcawgaac agtcagaaaa ataccttatg       420
aggggggcagg gctgaagctg ggccttgaag gatggatgaa atttggatag agaatgagga       480
agacagaggg nctccaagtg agagaagcat gaaaaatgag cargggcctg gatcagtggg       540
gtgtattcag agcacctytc cagatgcacc atgcatgctc acagtccctt gcctatgtgt       600
ggcagagtgt cccagccaga tgtgtgcccc caccccatgt ccatttacat gtccttcaat       660
gcccacctca aaaggyacyt cttctgtaaa gctttccctk ggtatcagga atcaaaatta       720
atcagggatc ttttcacact gctgttttt cctctttggt ccttctatca ctaaaactca       780
tctcattcag ccttacagca taactaatta tttgtttcc tcactaca                    828


<210> 304
<211> 2416
<212> DNA
<213> Homo sapiens

<400> 304
tcaatttcca ttaactcaga tcagccattg tgattcacca tttgtcaggc tctcaggttt        60
aacaaaacct actatccacca tcatccttca acagccacag tctgaattga gccaacattt       120
ttttttcttt gagaaagaag tggactgggg cacaactttt agtctgaggg gagctagtgg       180
aaatctagac aatagaagtc atcgatagca gcttttcctc aaatgtgtga ctcctcaggg       240
gctaaactgc tcttagctta gaattatgct ttactagaga tctagcagat aagtgggtta       300
atcactacca tcctgtaact agttatatag cttccagaca tgagggagac atcaaacagg       360
gatggaagca accccaagga tatgcaagaa gggcatgatg aaccccttcc cctctggcag       420
gagaacaagg ccaaccaagg gacagactgg aaagcactta gatgttttaag gaggagaaag       480
gggaagcttt gaccagtcct tgccttttgc caagttcagc cagttctccg ctgcttgcaa       540
cctctagcgc agtaacattt gcagaattgc agattttccc ccagatacta ggaggaaagg       600
gactttgggg ggtggggaag gggtcgtggt gtttttaaaag cataagttac ctgtttgcac       660
tgttttaaga taggaaaaa aaatagtgag caaggtgaac atcagacgta aatttgtgtg       720
ttttttatttt gtcatgctct tgaaaatgtt tgaccatttg tagtatacac agtgaaactt       780
gattctctgt tgcataaaac actatatttt tttgaaaatg ttactgtcca aaagcctctt       840
ccctcccttt ccttttccta tgtacttcct tcatacttgc tttactgatc agccaggcaa       900
tagccatcca agagctagag catgaaaacag ggccctttcc aagtaggctc tgggtgtcct       960
aagccagcgt gtgccctctg gtttagtgag tgtaatagag tccctggcac ctttcttttgc      1020
aaatgaggct aacagaccag actgcagcaa gttatcagat tcctcaatca gatgcactag      1080
gagtgaggag cccagggatg gagggggttc ctgaagtatt gcagttggct gtagtagctg      1140
agttcttttc catgttaccg aaactgtagc cagttacagt ttactcagga aaacggtaga      1200
tcaattcagc catggtagtg ctggttggca gggattggta acggagaga ctgctcatca      1260
gccaaaactc aagccttgcc ttttaggagg ccaccagcag agggacttgg tcctccttgt      1320
```

```
ctggtacttg tgtacatgcc ggtgacctga ggactccact cacactggcg agcaaaaagg    1380
gagcagtgat tctcttttct ctccccaccc cctgcccttt gttaccaaca ccagtttccc    1440
aggggtaca tgagtttctg aattttaaa aaatgttttt ggtttggttt ttctggggac    1500
tgataagtgc tttaagcaat gtccataccc cgtcaagact cccagcttag tcatttcctt    1560
gtatttttct gttcacagta tttgtgtgtg tgcttgtttt ggcagctcat tttggctgta    1620
ttatatattg agtgatgaat tgatcctctt ttttccctaa gggatatgaa ttgttttttct    1680
tgtgttatat tctgcttgtg aatagctgga gcaaacctgg ggctgacacg cgtaagstag    1740
ggctgcaaar cgagaagaga gccggtggag tgtacttgtc cctgacaggc tgacctacct    1800
gagtctctga gcttttcagt ccaaatcttt gcaaggctca aaatgccaca gaacctctcc    1860
tcttctcccc actcccatg gcagggaccg gaccatccct acatgcaaca tgctgttcct    1920
ccagccctc ccattgccat ggcaaaacag gtacctttgg ggcatggggg cattacatgg    1980
gatgcttgtg taatcgacca cctagccttc tctctcccct cccgtcctcc cccagaatca    2040
cttcctagga cacccgagct gcttgcccag ggtcctgttt ccctgctaac tccagagaag    2100
catcccaggg ctttgtgaca gtctctaatt cccttcccctt ctcgttaaga atcatattgt    2160
atagtagctt tcagaccata cagtattcat tgggttactc ctattattat caagtagctg    2220
gaattgtgaa ggtcggagta gttagatctt tagcttttat tccttatttt tttgtattac    2280
tctccatgtcg tataaattat tgatcatgtt gctggctttt ataaactcta agcgaaggag    2340
gagcactgcc tcagcctttg cacatggtaa tgaagcactg tttttaaata aaagrgrgaa    2400
mcmccaaaaa aaaaaa                                                    2416
```

```
<210> 305
<211> 545
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (509)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (521)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (541)
<223> n equals a,t,g, or c

<400> 305
  gaattcggca cgagccatgc ytggcctctc cttgattctt acagtcactt tgttggctgt      60
  ttctgactca gcagctacct gcattgtggc caaaggatga cctattcctt ctcaggaggg     120
  caaaaatgtg gaatagtgtc tgtccatgcc tctcctcatg ggctaccacc tctgccaccg     180
  tggttaatca gtaacaacca ggagagaagc tgctggaact gacctctggg aactccctgg     240
  atggtttggt gcaggaatgt agtaggcata cacgtggttg cgtggatcgg ggccctcctg     300
  atgtgagtag agaggtaaaa ggscaccatc tccttgacct ytggggaact catccacaaa     360
  gaagatgttt ccaaatgct tctgaagatt ggctaaaaat agccggtttc caccccgtg      420
  aatgcatcca ttctagacatg ctccttcacc aggaccagag aactgattta cagaagtgac     480
  atgaaaacat tccatcccag aatttgcant acctcaaatt naatttctac ctattaaaaa     540
  naaaa                                                                 545
```

```
<210> 306
<211> 1530
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (608)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1512)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1529)
<223> n equals a,t,g, or c


<400> 306
  ggctctgctg ggcatcatac ttgtcactgg gtaaacagtt tgcccactta ccgcagatga      60
  agctgcttgc cagggctctc cggctctgtg agtttgggag gcaggcatct tccaggaggc     120
  tggtggctgg ccagggatgt gtggggcccc ggcgagggtg ctgcgctccc gtccaggtgg     180
  ttgggcccag ggctgatctc ccaccctgtg gagcctgcat tactggaagg atcatgcggc     240
  cagatgatgc caacgtggcc ggcaatgtcc acggggggac catcctgaag atgatcgagg     300
  aggcaggcgc catcatcagc acccggcatt gcaacagcca gaacggggag cgctgtgtgg     360
  ccgccctggc tcgtgtcgag cgcaccgact tcctgtctcc catgtgcatc ggtgaggtgg     420
  cgcatgtcag cgcggagatc acctacacct ccaagcactc tgtggaggtg caggtcaacg     480
  tgatgtccga aaacatcctc acaggtgcca aaaagctgac caataaggcc acctgtggt      540
  atgtgcccct gtcgctgaag aatgtggaca aggtcctcga ggtgcctcct gttgtgtatt     600
  cccggcanga gcaggaggag gagggccgga agcggtatga agcccagaag ctggagcgca     660
  tggagaccaa gtggaggaac ggggacatcg tccagccagt cctcaaccca gagccgaaca     720
  ctgtcagcta cagccagtcc agcttgatcc acctggtggg gccttcagac tgcaccctgc     780
  acggctttgt gcacggaggt gtgaccatga agctcatgga tgaggtcgcc gggatcgtgg     840
  ctgcacgcca ctgcaagacc aacatcgtca cagcttccgt ggacgccatt aattttcatg     900
  acaagatcag aaaaggctgc gtcatcacca tctcgggacg catgacccttc acgagcaata     960
  agtccatgga gatcgaggtg ttggtggacg cgaccctgt tgtggacagc tctcagaagc    1020
  gctaccgggc cgccagtgcc ttcttcacct acgtgtcgct gagccaggaa ggcaggtcgc    1080
  tgcctgtgcc ccagctggtg cccgagaccg aggacgagaa gaagcgcttt gaggaaggca    1140
  aagggcggta cctgcagatg aaggcgaagc gacagggcca cgcggagcct cagccctaga    1200
  ctccctcctc ctgccactgg tgcctcgagt agccatggca acgggcccag tgtccagtca    1260
  cttagaagtt cccccttgg ccaaaaaccc aattcacatt gagagctggt gttgtctgaa    1320
  gtttctcgtat cacagtgtta acctgtactc tctcctgcaa acctacacac caaagcttta    1380
  tttatatcat tccagtatca atgctacaca gtgttgtccc gagcgccggg aggcgttggg    1440
  cagaaaccct cgggaatgct tccgagcacg ctgtagggta tgggaagaac ccagcaccac    1500
  tmataaagct gntgcttggc tggggaagna                                     1530


<210> 307
<211> 997
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (103)
<223> n equals a,t,g, or c


<400> 307
  aggtagtgag agacacatta cacctaacca acaagaagaa ggatcctccc ccttataatt      60
  taactatgtt tacagggaat gcgtacattg tggcttcccg agnatttcgt ccaacatgtt     120
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ttgaagaacc ctaaatccca acaactgatt gaatgggtaa aagacactta tagcccagat      180
gaacacctct gggccaccct tcagcgtgca cggtggatgc ctggctctgt tcccaaccac      240
cccaagtacg acatcttcag acatgacttc tattgccagg ctggtcaagt ggcagggtca      300
tgagggagac atcgataagg gtgctcctta tgctccctgc tctggaatcc accagcgggc      360
tatctgcgtt tatggggctg gggacttgaa ttggatgctt caaaaccatc acctgttggc      420
caacaagttt gacccaaagg tagatgataa tgctcttcag tgcttagaag aatacctacg      480
ttataaggcc atctatggga ctgaactttg agacacacta tgagagcgtt gctacctgtg      540
gggcaagagc atgtacaaac atgctcagaa atgctgggca cagtgtgggt gggagaccag      600
ggctttgcaa ttcgtggcat cctttaggat aagagggctg mtattagatt gtgggtaagt      660
agatcttttg ccttgcaaat tgctgcctgg gtgcgatgctg cttgttctct caccectaac      720
cctagtagtt cctccactaa ctttctcact aagtgagaat gagaactgct gtgataggga      780
gagtgaagga gggatatgtg gtagagcact tgatttcagt tgaatgcctg ctggtagctt      840
ttccattctg tggagctgcc gttcctaata attccaggtt tggtagcgtg gaggagaact      900
ttgatggaaa gagaaccttc ccttctgtac tgttaactta aaaataaata gctcctgatt      960
caaagtaagg aaaaaraaaa aaagaaaaaa aactcga                              997
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<210> 308
<211> 2345
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2178)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2332)
<223> n equals a,t,g, or c

<400> 308
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ttgaggccga cgctaggggc ccggaagraa actgcgaggc gaaggtgacc ggggaccgag       60
catttcagat ctgctcggta gacctggtgc accaccacca tgttggctgc aaggctggtg      120
tgtctccgga cactaccttc tagggtttc cacccagctt tcaccaaggc ctcccctgtt      180
gtgaagaatt ccatcacgaa gaatcaatgg ctgttaacac ctagcaggga atatgccacc      240
aaaacaagaa ttgggatccg gcgtgggaga actggccaag aactcaaaga ggcagcattg      300
gaaccatcga tggaaaaat atttaaaatt gatcagatgg gaagatggtt tgttgctgga      360
ggggctgctg ttggtcttgg agcattgtgc tactatggct tgggactgtc taatgagatt      420
ggagctattg aaaaggctgt aatttggcct cagtatgtca aggatagaat tcattccacc      480
tatatgtact tagcagggag tattggttta acagctttgt ctgccatagc aatcagcaga      540
acgcctgttc tcatgaactt catgatgaga ggctcttggg tgacaattgg tgtgacctttt      600
gcagccatgg ttggagctgg aatgctggta cgatcaatac catatgacca gagcccaggc      660
ccaaagcatc ttgcttggtt gctacattct ggtgtgatgg gtgcagtggt ggctcctctg      720
acaatattag ggggtcctct tctcatcaga gctgcatgt acacagctgg cattgtggga      780
ggcctctcca ctgtggccat gtgtgcgccc agtgaaaagt ttctgaacat gggtgcaccc      840
ctgggagtgg gcctgggtct cgtctttgtg tcctcattgg gatctatgtt tcttccacct      900
accaccgtgg ctggtggcca tctttactca gtggcaatgt acggtggatt agttctttc      960
agcatgttcc ttctgtatga taccagaaa gtaatcaagc gtgcagaagt atcaccaatg     1020
tatggagttc aaaaaatga tcccattaac tcgatgctga gtatctacat ggatacatta     1080
aatatattta tgcgagttgc aactatgctg gcaactggag gcaacagaaa gaaatgaagt     1140
gactcagctt ctggcttctc tgctacatca aatatcttgt ttaatggggc agatatgcat     1200
taaatagttt gtacaagcag ctttcgttga agtttagaag ataagaaaca tgtcatcata     1260
tttaaatgtt ccggtaatgt gatgcctcag gtctgcctct ttttctggag aataaatgca     1320
gtaatcctct cccaaataag cacacacatt ttcaattctc atgtttaaa gatttttaaa     1380
tgtttttggtg aatgtgaaaa ctaaagtttg tgtcatgaga atgtaagtct tttttctact     1440
ttaaaattta gtaggttcac tgagtaacta aaatttagca aacctgtgtt tgcatatttt     1500
```

```
tttggagtgc agaatattgt aattaatgtc ataagtgatt tggagctttg gtaaagggac   1560
cagagagaag gagtcacctg cagtcttttg tttttttaaa tacttagaac ttagcacttg   1620
tgttattgat tagtgaggag ccagtaagaa acatctgggt atttggaaac aagtggtcat   1680
tgttacattc atctgctgaa cttaacaaaa ctgttcatcc tgaaacaggc acaggtgatg   1740
cattctcctg ctgttgcttc tcagtgctct cttctccaata tagatgtggt catgtttgac   1800
ttgtacagaa tgttaatcat acagagaatc cttgatggaa ttatatatgt gtgtttact   1860
tttgaatgtt acaaaaggaa ataactttaa aactattctc aagagaaaat attcaaagca   1920
tgaaatatgt tgcttttttcc agaatacaaa cagtatactc atgattgcta agtgtttttt   1980
tatttttgca tatttattga actgtctaat tgaatacagc ttgctcttgt cacctcttca   2040
agctttcaag ccttttataga aaagcttctt tgtggcttac actggaaatt atgaaagcag   2100
ttttctcct aagacttttg gtttctcgca ttgcctctca gactaagcac taaaaagcaa   2160
agcaaaacag aactagtnct gtcttaatga aatatatcaa cccaaaagtg taatgaggaa   2220
aatgcttcat tagtttccc tagcagactt ttacttctct tacactgcta caccattact   2280
ttcttgagac atttgtaagt cctttgatac agaagagtta tatttaggag gnctttaatg   2340
aaggg                                                              2345
```

<210> 309
<211> 2369
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1598)
<223> n equals a,t,g, or c

<400> 309
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tttttttttt tttttttttt tttttncaag atcattgttt atttattact tcagataaaa    60
agatagtata catattaggg aatccttaa aattcaactc tagagttata caccatctag   120
tactttgca atgaatgtta acaacaacaa aaaaatctc taaacacctg aaagcccac    180
tattaacatg gactatggta ataaaaaatt ttgacattta atttgttcaa catatgtgat   240
ttacattatg aaaccaatgg tgatgataca ataaagtgat aaagaaatag taaaaataaa   300
ctttaaaaag caaaggttta tagtctgaca atgctaatta tcctaattgt atataaaaaa   360
ttaaaacata gagctttctg ttacaaaatt cttaatcctc tgggttgtaa tcattacttg   420
ctaccaattt acatgcaaca tctgctagga ctgacatttg attttttccc ccaagaatgt   480
gtgagtagat aaatgacatt tcagagcaga tattaattta cttgtggaca gaaaaagaaa   540
ctcaagattg gtactggtca caagcctctt cccaatagaa attataaaaa cagtaagata   600
aaatttaaaa aaaatctaaa aaggggatgc ataggcaaag agtaccataa atggcacagc   660
tcaaaaaatc ccaggaccaa tcagacacac atcttttctc tctccttcag cgacaagagg   720
tcgatttttgc catcaaaataa ccatgattga agcaagcgag gggcaccagg tgtacaactg   780
attagatctt gcaaaatact aagatgggag cagggtggc cagaagaagg ggtaatttat   840
atataattca aactatatac agcataaatg gaatgcagcc catcccaaac tggctctgtg   900
aaacaattgg aacttttatg ttaaaattat aacaagtgta ataatacaat agatttacat   960
gggaagcaaa atccaaggga cattttatat taagtattta ctgtgctgtt tcaatttaaa   1020
aataattttg ctaagtatac atctcaactg aagtctatgt aaaaaatgtc ctaatagata   1080
cagatattta cctttggtga gttgaaggcc tttttgtgac ttctgtctga actgtaggca   1140
gaatgctaga tgtacatgca catatggaga aactcaagct gaggtcatcc aaaagctgtg   1200
cgtatgagga ggctggaggt actttgaaag tcaaagtaga ccagaaaccc aaaacaggta   1260
acagtgagga tggcaacagg gaatggaatg ccaatatggc agtaaaactt ttttttaaaaa   1320
cagaaagagg caactgcctc gtaccagcag atctgctgtc acgtacaaaa aagaaaaagc   1380
cacccaccat tttgtaaaac agaagccaat tatagtgtgg gaaagtacaa attacagaaa   1440
accagaagtc aacagaagaa aaaactactgg tttacttgag agaaaggaga atggttcacc   1500
```

```
ccgagcagag ttacttggtg aacgccgcca ccaccgccca cagaacctca ttggtgttgg    1560
ccttcagaca ttccacttca gggtctaagt cgagaarntg ccgcactctc ttggtagcca    1620
aatcatactg ctcgtccaga agaggagcaa aagcattctc caggacgtcc gaggcatgag    1680
ccaggtaaat gagggccagc aagcgcctgt ccatgcggtg agggtcattc acccatttgt    1740
caagaacggc ttcctgtact ttcttgatga ggcgctgctt aatgttgtta ttggtgaggg    1800
gatgtgttgt catgtcaaaa agtaggaagt tctgtttctc tgttgtcaat acaccctttt    1860
ccaccaggtt tttagctaat cgttcccgta catttcttaa ctgataatgc aattttaatg    1920
gattccatgt ctcaccacta agtaattcaa tccagttctg gaccgtttct ggaggctgag    1980
tttccttaac atgcttcaga gcttcatcaa gaagaacatc ccctgttgga gcatctgact    2040
tacagattac ctttcttgtt aatagacttt tacgtctcat tccacaagcc tctagttgta    2100
accttcctct caatgctaat tcaattaaca tacagccacg taatccagat gatatacagt    2160
cattccaaaa tgatgtgtaa accttcgcgg tccttgaggc ccagcaggag cacttcctcc    2220
atcagggtca gccgcgcttc cttggagtcg cccttgtcgt cgtcgtcctg ctcgtcgcgg    2280
cggcgttgc gcgcgtcctc gctgctagcc gcgccgccgc ccgccgcccg ctccttgtcg    2340
gcggcgttgc gggaggcctc ggtgcgccg                                       2369
```

```
<210> 310
<211> 1181
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1181)
<223> n equals a,t,g, or c

<400> 310
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gggacgtgtg gtttcagctc gtgcgcctcc ccgtgggttt gcgacgttta gcgactattg     60
cgcctgcgcc acgccggctg cgagactggg gccgtggytg ctggtcccgg gtgatgctag    120
gcggctccct gggctccagg ctgttgcggg gtgtaggtgg gagtcacgga cggttcggggg   180
cccgaggtgt ccgcgaaggt ggcgcacatg gacggcaggg gagagcatgg ctcagcggat    240
ggtctggggtg gacctggaga tgacaggatt ggacattgag aaggaccaga ttattgagat    300
ggcctgtctg ataactgact ctgatctcaa cattttggct gaaggtccta acctgattat    360
aaaacaacca gatgagttgc tggacagcat gtcagattgg tgtaaggagc atcacgggaa    420
gtctggcctt accaaggcag tgaaggagag tacaattaca ttgcagcagg cagagtatga    480
atttctgtcc tttgtacgac agcagactcc tccagggctc tgtccacttg caggaaattc    540
agttcatgaa gataagaagt ttcttgacaa atacatgccc cagttcatga aacatcttca    600
ttatagaata attgatgtga gcactgttaa agaactgtgc agacgctggt atccagaaga    660
atatgaattt gcaccaaaga aggctgcttc tcatagggca cttgatgaca ttagtgaaag    720
catcaaagag cttcagtttt accgaaataa catcttcaag aaaaaaatag atgaaaagaa    780
gaggaaaatt atagaaaatg gggaaaatga gaagaccgtg agttgatgcc agttatcatg    840
ctgccactac atcgttatct ggaggcaact tctggtgggtt tttttttctc acgctgatgg    900
cttggcagag cmcttcggtt aacttgcatc tccagattga ttactcaagc agacagcaca    960
cgaaatacta tttttctcct aatatgctgt ttccattatg acacagcagc tcctttgtaa   1020
gtaccaggtc atgtccatcc cttggtacat atatgcattt gcttttaaac catttctttt   1080
gtttaaataa ataaataagt aaataaagct agttctattg aaatgcaaaa aaaaaaaaaa   1140
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa n                        1181
```

```
<210> 311
<211> 1537
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (163)
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1024)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1320)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1533)
<223> n equals a,t,g, or c

<400> 311

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ctttttgtgt tccggccgat cccacctctc ctcgaccctg gacgtctacc ttccggaggc    60
ccacatcttg cccactccgc gcgcggggct agcgcgggtt tcagcgacgg gagccctcaa   120
gggacatggc aactacagcg gcgccggcgg gcggcgcccg aanatggagc tggcccggaa   180
tggggagggt tcgaagaaaa catccagggc ggaggctcag ctgtgattga catggagaac   240
atggatgata cctcaggctc tagcttcgag gatatgggtg agctgcatca gcgcctgcgc   300
gaggaagaag tagacgctga tgcagctgat gcagctgctg ctgaagagga ggatggagag   360
ttcctgggca tgaagggctt taagggacag ctgagccggc aggtggcaga tcagatgtgg   420
caggctggga aaagacaagc ctccagggcc ttcagcttgt acgccaacat cgacatcctc   480
agaccctact ttgatgtgga gcctgctcag gtgcgaacag ggctcctgga gtccatgatc   540
cctatcaaga tggtcaactt ccccagaaa attgcaggtg aactctatgg acctctcatg   600
ctggtcttca ctctggttgc tatcctactc catgggatga agacgtctga cactattatc   660
cgggagggca ccctgatggg cacagccatt ggcacctgct tcggctactg gctgggagtc   720
tcatccttca tttacttcct tgcctacctg tgcaacgccc agatcaccat gctgcagatg   780
ttggcactgc tgggctatgg cctctttggg cattgcattg tcctgttcat cacctataat   840
atccacctcc acgccctctt ctacctcttc tggctgtgg tgggtggact gtccacactg    900
cgcatggtag cagtgttggt gtctcggacc gtgggcccca cacgcggct gctcctctgt    960
ggcaccctgg ctgccctaca catgctcttc ctgctctatc tgcattttgc ctaccacaaa   1020
gtgntagagg ggatcctgga cacactggag ggcccaaca tcccgcccat ccagaggctc   1080
cccagagaca tccctgccat gctccctgct gctcggcttc ccaccaccgt cctcaacgcc   1140
acagccaaag ctgttgcggt gacccgcag tcacactgac cccacctgaa attcttggcc   1200
agtcctcttt cccgcagctg cagagaggag gaagactatt aaaggacagt cctgatgaca   1260
tgtttcgtag atggggtttg cagctgccac tgagctgtag ctgcgtaagt acctccttgn   1320
agctgtcggc acttctgaaa gcacaaggcc aagaactcct ggccaggact gcaaggctct   1380
gcagccaatg cagaaaatgg gtcagctcct ttgagaaccc ctccccacct accccttcct   1440
tcctctttat ctctcccaca ttgtcttgct aaatatagac ttggtaatta aaaaaaaaa   1500
aaaaaaaaaa aaaaaaaaaa aaaaagggg ggncccc                            1537
```

<210> 312
<211> 1493
<212> DNA
<213> Homo sapiens

<400> 312

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tgcatgccaa aaccaatgcc tgccaaacaa aatcttagac atcccaatat aatatgttag    60
ttatatttct attcacatca ttattgaaaa tacccagctc agtgcctggc ttaataaatg   120
tttaattccc ttacctactc ttgctctatt tttttatttg aaatgtgagat gagcaaaata   180
acacattcat ggctgaagca attttttgga catttcttgt taccaaaaga tctataatca   240
ggatgatcct gagctgttca aacaagctgt atataaacag acaatgaaac tctttgcaga   300
gctggaaatt aaaaggaaag agagagaagc caaagagatg catgaaagga aacgacaaag   360
```

```
ggaagaagag attgaagctc aagaaaaagc caaacgggaa agagagtggc agaaaaactt      420
tgaggaaagt cgagatggtc gtgtggacag ctggcgaaac ttccaagcca atacgaaggg      480
gaagaaagag aagaaaaatc ggaccttcct gagaccaccg aaagtaaaaa tggagcaacg      540
tgagtgaccg cccaaggtca caggcacaga acctttcccc tgctacctcc cttcctgctt      600
cgaaggactc attcttcct cccacttcca ccccaacata gagtagtatt tgcttttag      660
tccattttgt tttcaatacg atttaatatc gatcagagta attcttttgt acattgaaat      720
gaggggcttg gtttaaaaaa agacctttcc ctctccctgc ccctagaaca accagtatta      780
gaaggtgcca ccattggtgc tgccttctct tcccacagcc tgtaactcag tgtttttgtac      840
ttcactgaat tgtgatggtt agaaacttcg tggatagttt gtggaaatca tccaattaaa      900
catctgctt aaaacagtgt tgctgtgact tcagagacaa gcctggaagg ggcaccttag      960
gaagcccctt cgcttcagtt gctcgcttct gggtgtgctc ccttcgaagg cccagataag     1020
acagggaaca cttgtgagca cacagagcag catctgatgc cctgtggtgt ttggcatgtg     1080
cccctgtct actgaccaat cagtgtggca tgaggcccac gccacccaaa ccttcactt     1140
tccaaagagc tagccgtcct ccaccagta ccatgtccta gcctgtctgc atttgttagt     1200
ggtaatattc tttatgtata ataaattttt atacccaagc cattgatgta ctttcttg     1260
tactctccct tgtgggtccc ttgtctggct tggctgaacc ccaaaatgct ttggggttgg     1320
acagacctgg ctgaacctta gtttcttcat ctatgaaatg ggaatatgaa ttactgcagc     1380
agcttttagg gcagatttgc catggcatat acaaggtaac taccatagtg ctccttgggt     1440
attgccaata tcctattatt tctgtgtaaa atgaagatac tgattgtttt gag           1493
```

<210> 313
<211> 577
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> n equals a,t,g, or c

<400> 313

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aattcggcag aggnattata tacactatac tggcatttac tgtttcaccc agcccggaaa       60
gtcagagatg tatattggaa aatttacaac tccatctaca ttggttccca ggacgctctc      120
atagcacatt acccaagaat ctacaacgat gataagaaca cctatattcg ttatgaactt      180
gactatatct tataatttta ttgtttattt tgtgtttaat gcacagctac ttcacacctt      240
aaacttgctt tgatttggtg atgtaaactt ttaaacattg cagatcagtg tagaactggt      300
catagaggaa gagctagaca tccagtagca tgatttttaa ataacctgtc tttgttttg      360
atgttaaaca gtaaatgcca gtagtgacca agaacacagt gattatatac actatactgg      420
agggatttca tttttaattc atctttatga agatttagaa ctcattcctt gtgtttaaag      480
ggaatgttta attgagaaat aaacatttgt gwacaaaatg ytaaaaaaaa aaaaaaaaaa      540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aactcga                             577
```

<210> 314
<211> 2860
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (16)
<223> n equals a,t,g, or c

```
<400> 314
gtgtngaccg ctctcncaat atggctcccc cgggctggca grwrktcrgt cwckrgtggc        60
tagcctgtcc tgacagggga gagttaagct cccgttctcc accgtgccgg ctggcaggt       120
gggctgaggg tgaccgagag accagaacct gcttgctgga gcttagtgct cagagctgca      180
gagggaggtt ccgccgcctcc tctgctgtca gcgccggcag ccctcccgg cttcacttcc      240
tcccgcagcc cctgctactg agaagctccg ggatcccagc agccgccacg ccctggcctc      300
agcctgcggg gcttccagtc aggccaacac cgacgcgcac tgggagggaa gacaggaccc      360
ttgacatctc catctgcaca gaggtcctgg ctggaaccga gcagcctcct cctcctagga     420
tgacctcacc ctccagctct ccagtttca ggttggagac attagatgga ggccaagaag      480
atggctctga ggcggacaga ggaaagctgg attttgggag cgggctgcct cccatggagt     540
cacagttcca gggcgaggac cggaaattcg ccccttcaga taagagtcaa cctccaacta     600
ccgaaaggga acaggtgcca gtcagccgga tccaaaccga tttgaccgag atcggctctt     660
caatgcggtc tcccgggtg tcccgagga tctggctgga cttccagagt acctgagcaa      720
gaccagcaag tacctcaccg acttcggaaa tacacagagg gctccacagg taagacggcc     780
tgatgaaggc tgtgctgaaa cttaaggac gggttcaatg cctgcattct gccactgctg     840
cagatcgacc gggactctgg caatcctcag cccctggtaa atgcccagtg cacagatgac     900
tattaccgag gccacagcgc tctgcacatc gccattgaga aagaggagtc tgcagtgtgt     960
gaagctcctg gtggagaatg gggccaatgt gcatgcccgg acttcttcca                1020
gaagggccaa gggacttgct tttatttcgg tgagctaccc ctctctttgg ccgcttgcac    1080
caagcagtgg gatgtggtaa gctacctcct ggagaaccca caccagcccg ccagcctgca    1140
ggccactgac tcccagggca acacagtcct gcatgcccta gtggatgatc tcggacaact    1200
cagctgagaa cattgcactg gtgaccagca tgtatgatgg gctcctccaa gctkgggscc    1260
sccytctgcc ctaccgtgca gcttgaggac atccgcaacc tgcaggatct cacgcctctg    1320
aagctggccg ccaaggaggg caagatcgag attttcaggc acatcctgca gcgggagttt    1380
tcaggactga gccacctttc ccgaaagttc accgagtggt gctatgggcc tgtccgggtg    1440
tcgctgtatg acctggcttc tgtggacagc tgtgaggaga actcagtgct ggagatcatt    1500
gcctttcatt gcaagagccc gcaccgacac cgaatggtcg ttttggagcc cctgaacaaa    1560
ctgctgcagg cgaaatggga tctgctcatc cccaagttct tcttaaactt cctgtgtaat    1620
ctgatctaca tgttcatctt caccgctgtt gcctaccatc agcctaccct gaagaagcag    1680
gccgcccctc acctgaaagc ggaggttgga aactccatgc tgctgacggg ccacatcctt    1740
atcctgctgg ggggatctca cctcctcgtg gggccagctg tggtacttct ggcggcgcca    1800
cgtgttcatc tggatctcgt tcatagacag ctactttgga aatcctcttc ctgttccagg    1860
cctgcttca cagtggtgtc ccaggtgctg tgtttcctgg gccatcggat ggtacctgcc    1920
cctgcttgtg tctgcgctgg tggctgggct ggctgaacct gctttactaa tacacgtggc    1980
gttccagcac aagcgagtc tacagtttca tgwtccctga agccctggtg agcctgagcc    2040
aggaggcttg gcgcccgaa gctcctacag gccccaatgc cacagagtca gtgcagccca    2100
tggagggaca ggaggacgag ggcaacgggg cccagtacag gggtatcctg gaagcctcct    2160
tggagctctt caaattcacc atcggcatgg gcgagctggt cttccaggag cagctgcact    2220
tccgcggcat ggtgctgctg ctgctgctgg cctacgtgct gctcacctac atcctgctgc    2280
tcaacatgct caaccatcct atgaagcgaa cgtcacagtg tcgccactga cagctggaac    2340
atctggaagc tgcagaaagc catctctgtc ctggagatgg agaatggcta ttggtggtgc    2400
aggaaaaagc agcgggcagg tgtgatgctg accgttggca ctaagcccag atggcagccc    2460
cgatgagcgc tggtgcttca gggtggagga ggtgaactgg gcttcatggg gagcagacgc    2520
tgcctacgct gtgtgaggac ccgtcagggg caggtgtccc tcgaactctc gagaaccctg    2580
tcctggcttc ccctcccaag gaggatgaag atggtgcctc tgaggaaaac tatgtgcccg    2640
tccagctcct ccagtccaac tgatggccca gatgcagcag gaggccagag gacagagcag    2700
aggatctttc caaccacatc tgctggctct ggggtcccag tgaattctgg tggcaaatat    2760
atattttcac taactcaaaa aaaaaaaaaa aaaaaaaaaa aaaavgaggg ggggcccgkt    2820
asccaawttc gcccctataag tgagtgccwa ttacgataaa                         2860


<210> 315
<211> 876
<212> DNA
<213> Homo sapiens

<220>
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<221> SITE
<222> (119)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (120)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (377)
<223> n equals a,t,g, or c

<400> 315
  ctgcttgtgt ctgcgctggt gctgggctgg ctgaacctgc tttactatac acgtggcttc     60
  cagcacacag gcatctacag tgtcatgatc cagaagccct ggtgagcctg agccaggann    120
  ttggcgcccc gaagtcccta caggccccaa tgccacagag tcagtgcagc ccatggaggg    180
  acaggaggac gagggcaacg gggcccagta caggggtatc ctggaagcct ccttggagct    240
  cttcaaattc accatcggca tgggcgagct ggccttccag gagcagctgc acttccgcgg    300
  catggtgctg ctgctgctgc tggcctacgt gctgctcacc tacatcctgc tgctcaacat    360
  gctcatcgcc ctcatgnagc gagaccgwca acagtgtcgc cactgacagc tggagcatct    420
  ggaagctgca gaaagccatc tctgtcctgg agatggagaa tggctattgg tggtgcagga    480
  agaagcagcg ggcaggtgtg atgctgaccg ttggcactaa gccagatggc agccccgatg    540
  agcgctggtg cttcagggtg gaggaggtga actgggcttc atgggagcag acgctgccta    600
  cgctgtgtga ggacccgtca ggggcaggtg tccctcgaac tctcgagaac cctgtcctgg    660
  cttcccctcc caaggaggat gaggatggtg cctctgagga aaactatgtg cccgtccagc    720
  tcctccagtc caactgatgg cccagatgca gcaggaggcc agaggacaga gcagaggatc    780
  tttccaacca catctgctgg ctctgggggtc ccagtgaatt ctggtggcaa atatatattt    840
  tcactaamwm aaaaaaaaaa aaaaaaaaaa actcga                               876


<210> 316
<211> 2025
<212> DNA
<213> Homo sapiens

<400> 316
  catgacccgc ctgatgcgat cccgcacagc ctctcggttcc agcgtcactt ctctggatgg     60
  cacccgcagc cgctcccaca ccagcgaggg cacccgaagc cgctcccaca ccagcgaggg    120
  cacccgcagc cgctcgcaca ccagcgaggg ggcccacctg gacatcaccc ccaactcggg    180
  tgctgctggg aacasgccgg gcccaagtcc atggaggtct cctgctaggc ggctgccca     240
  gctgccgccc ccggactctg atctctgtag tggccccctc ctccccggcc cctttctcgcc    300
  ccctgcctgc catactgcgc ctaactcggt attaatccaa agcttatttt gtaagagtga    360
  gctctggtgg agacaaatga ggtctattac gtgggtgccc tctccaaagg cggggtggcg    420
  gtggaccaaa ggaaggaagc aagcatctcc gcatcgcatc ctcttccatt aaccagtcggc    480
  cggttgccac tctcctcccc tccctcagag acaccaaact gccaaaaaca agacgcgtac    540
  agcacacact tcacaaagcc aagcctaggc cgccctgagc atcctggttc aaacgggtgc    600
  ctggtcagaa ggccagccgc ccacttcccg tttcctcttt aactgaggag aagctgatcc    660
  agtttccgga aacaaaatcc ttttctcatt tggggagggg ggtaatagtg acatgcaggc    720
  acctcttta aacaggcaaa acaggaaggg ggaaaaggtg ggattcatgt cgaggctaga    780
  ggcatttgga acaacaaatc tacgtagtta acttgaagaa accgattttt aaagttggtg    840
  catctcagaaa gctttgaatg cagaagcaaa caagcttgat ttttctagca tcctcttaat    900
  gtgcagcaaa agcaggcrac aaaatctcct ggctttacag acaaaaatat ttcagcaaac    960
  gttgggcatc atggtttttg aaggctttag ttctgctttc tgcctctcct ccacagcccc   1020
  aacctcccac ccctgataca tgagccagtg attattcttg ttcagggaga agatcattta   1080
  gatttgtttt gcattccta gaatggaggg caacattcca cagctgccct ggctgtgatg   1140
  agtgtccttg caggggccgg agtaggagca ctggggtggg ggcggaattg gggttactcg   1200
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atgtaaggga ttccttgttg ttgtgttgag atccagtgca gttgtgattt ctgtggatcc    1260
cagcttggtt ccaggaattt tgtgtgattg gcttaaatcc agttttcaat cttcgacagc    1320
tgggctggaa cgtgaactca gtagctgaac ctgtctgacc cggtcacgtt cttggatcct    1380
cagaactctt tgctcttgtc ggggtggggg tgggaactca cgtggggagc ggtggctgag    1440
aaaatgtaag gattctggaa tacatattcc atgggacttt ccttccctct cctgcttcct    1500
cttttcctgc tccctaacct ttcgccgaat ggggcagcac cactgacgtt tctgggcggc    1560
cagtgcggct gccaggttcc tgtactactg ccttgtactt ttcattttgg ctcaccgtgg    1620
attttctcat aggaagtttg gtcagagtga attgaatatt gtaagtcagc cactgggacc    1680
cgaggatttc tgggaccccg cagttgggag gaggaagtag tccagccttc caggtggcgt    1740
gagaggcaat gactcgttac ctgccgccca tcaccttgga ggccttccct ggccttgagt    1800
agaaaagtcg gggatcgggg caagagaggc tgagtacgga tgggaaacta ttgtgcacaa    1860
gtctttgcca aggagtttct taatgagata tttgtattta tttccagacc aataaatttg    1920
taactttgca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaactc    1980
gagggggggcc cgtacccaat tcgccgtata tgatcgtaaa caatc                   2025
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<210> 317
<211> 3026
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1938)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2593)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3006)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3019)
<223> n equals a,t,g, or c

<400> 317
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taggcagcac tgaaatatcc taaccccta agctccaggt gccctgtggn acgagcaact      60
ggactatagc agggctgggc tctgtcttcc tggtcatagg ctcactcttt cccccaaatc    120
ttcctctgga gctttgcagc caaggtgcta aaaggaatag gtaggagacc tcttctatct    180
aatccttaaa agcataatgt tgaacattca ttcaacagct gatgccctat aacccctgcc    240
tggatttcct cctattaggc tataagaagt agcaagatct ttacataatt cagagtggtt    300
tcattgcctt cctaccctct ctaatggccc ctccatttat ttgactaaag catcacacag    360
tggcactagc attataccaa gagtatgaga aatacagtgc tttatggctc taacattact    420
gccttcagta tcaaggctgc ctggagaaag gatggcagcc tcagggcttc cttatgtcct    480
ccaccacaag agctccttga tgaaggtcat cttttccccc tatcctgttc ttcccctccc    540
cgctcctaat ggtacgtgtg tacccaggct ggttcttggg ctaggtagtg gggaccaagt    600
tcattacctc cctatcagtt ctagcatagt aaactacggt accagtgtta gtgggaagag    660
```

```
ctgggttttc ctagtatacc cactgcatcc tactcctacc tggtcaaccc gctgcttcca    720
ggtatgggac ctgctaagtg tggaattacc tgataaggga gagggaaata caaggagggc    780
ctctggtgtt cctggcctca gccagctgcc cacaagccat aaaccaataa aacaagaata    840
ctgagtcagt tttttatctg ggttctcttc attcccactg cacttggtgc tgctttggct    900
gactgggaac accccataac tacagagtct gacaggaaga ctggagactg tccacttcta    960
gctcggaact tactgtgtaa ataaactttc agaactgcta ccatgaagtg aaaatgccac   1020
attttgcttt ataatttcta cccatcgttgg gaaaaactgg cttttttccca gccctttcca   1080
gggcataaaa ctcaacccct tcgatagcaa gtcccatcag cctattattt ttttaaagaa   1140
aacttgcact tgtttttctt tttacagtta cttccttcct gccccaaaat tataaactct   1200
aagtgtaaaa aaagtctta acaacagctt cttgcttgta aaaatatgta ttatacatct   1260
gtattttaa attctgctcc tgaaaaatga ctgtcccatt ctccactcac tgcatttggg   1320
gcctttccca ttggtctgca tgtctttat cattgcaggc cagtggacag agggagaagg   1380
gagaacaggg gtcgccaaca cttgtgttgc tttctgactg atcctgaaca agaaagagta   1440
acactgaggc gctcgctccc atgcacaact ctccaaaaca cttatcctcc tgcaagagtg   1500
ggcttccag ggtctttact gggaagcagt taagcccct cctcacccct tccttttttc   1560
tttctttact cctttggctt caaaggattt tggaaaagaa acaatatgct ttacactcat   1620
tttcaatttc taaatttgca ggggatactg aaaaatacgg caggtggcct aaggctgctg   1680
taaagttgag gggagaggaa atcttaagat tacaagataa aaaacgaatc ccctaaacaa   1740
aaagaacaat agaactggtc ttccattttg ccaccttttcc tgttcatgac agctactaac   1800
ctggagacag taacatttca ttaaccaaag aaagtgggtc acctgacctc tgaagagctg   1860
agtactcagg ccactccaat cacectacaa gatgccaagg aggtcccagg aagtccagct   1920
ccttaaactg acgctagnma ataaacctgg gcaagtgagg caagagaaat gaggaagaat   1980
ccatctgtga ggtgayaggc aaggatgaaa gacaaagaag gaaaagagta tcaaaggcag   2040
aaaggagatc atttagttgg gtctgaaagg aaaagtcttt gctatccgac atgtactgct   2100
agtacctgta agcattttag tgcccagaat ggaaaaaaaa atcagctatt ggtaatataa   2160
taatgtcctt tccctggagt cagttttttt aaaaagttaa ctcttagttt ttacttgttt   2220
aattctaaaa gagaagggag ctgaggccat tccctgtagg agtaaagata aaaggatagg   2280
aaaagattca aagctctaat agagtcacag cttccccagg tataaaacct aaaattaaga   2340
agtacaataa gcagaggtgg aaaatgatct agttcctgat agctacccac agagcaagtg   2400
atttataaat ttgaaatcca aactactttc ttaatatcac tttggtctcc attttttccca   2460
ggacaggaaa tatgtccccc cctaactttc ttgcttcaaa aattaaaatc cagcatccca   2520
agatcattct acaagtaatt ttgcacagac atctcctcac cccagtgcct gtctgggagc   2580
cacccaaggt canccaaaca acttggttgt gaacccaact gccttaacct tctgggggag   2640
ggggattagc tagactagga gacccagaag tgaatgggaa agggtgagga cttcacaatg   2700
ttggcctgtc agagcttgat·tagaagccaa gacagtggca gcaaaggaag acttggccca   2760
ggaaaaacct gtgggttgtg ctaatttctg tccagaaaat agggtggaca gaagcttgtg   2820
gggtgcatgg aggaattggg acctggttat gttgttattc tcggactgtg aattttggtg   2880
atgtaaaaca gaatattctg taaacctaat gtctgtataa ataatgagcg ttaacacagt   2940
aaaatattca ataagaagtc aaaaaaaaaa aaaaaaaact cgaggggggg cccggtaccc   3000
aatttnccaa atagagatng tattac                                         3026
```

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<210> 318
<211> 712
<212> DNA
<213> Homo sapiens

<400> 318
gcaggctttg tgctcaccta caagctgggt gagcagggtg ccagcagcct gtttcctctt     60
ctcctgctgg accacggcgt ttctgctccc gagttgggac tgtggaatgg tgtgggtgct    120
gtggtctgct ccatcgctgg ctcctccctg ggtgggacct tgctggccaa gcactggaaa    180
ctgctgcctc tgttgargtc ggtgctgcgc ttccgcctcg ggggcctagc ctgtcagact    240
gccttggtct tccacctgga caccttgggg gccagcatgg acgctggcac aatcttgaga    300
gggtcagcct tgctgagcct atgtctggac cacttcttgg gaggcctggt caccacagtc    360
accttcactg ggatgatgcg ctgcagccag ctggccccca gggctgcag gccacacact    420
acagccttct ggccacgctg gagctgctgg ggaagtgct gctgggcact ctgcggaggc    480
ctggctgatg ggtggggc acatccctgc ttcttgctcc tgctcatcct ctctgccttt    540
cccgttctgt acctggacct agcaccccagc accttctct gagctgagtg gctggagtgg    600
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      tcaataaagc cacatgtgcc tgtggcccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      660
      aactggaggg ggggcccggt acccaaatcg ccggatatga tcgtaaacaa tc             712


<210> 319
<211> 1289
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1273)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1287)
<223> n equals a,t,g, or c

<400> 319
      caaaatttca gaactttcag gagggcaaga gaatatcaaa caaagatttc tggaagtatt      60
      ttgccaacct tctggttgag ctgcaagaaa atatttatgg tgagaacttt tctgtttccc     120
      gttattgggt ttttggttgg tttttgtttg tttttttacta tgctttggtc tgtaaaaata    180
      tgcaactgaa ctacattcag aaggaaatat tgtctcacata gaatattata tgaagttggt     240
      acataattct gatgaggaaa aaaaatcttt gcaattcttt aagccatatt gttgtttttc     300
      tgtgttgttt tccctggatg aaaatatcag tattaagtag acagcatatt attcaagtgt     360
      ttagacttat taatatgttc ttgtcctgta tttatacata tgtgtattt ggaaagtatt       420
      gcctttttta agggaagcta taattcgata catagtgaaa aagggaatgg tgacccctt       480
      gtgcctcttc cactgaggat aacaaacagc attgtaatcc attctcttgc accttcttct      540
      tcttatcttg ttattacggt tttattaatt ttgtagaggg acagggagtg ggcaagggga     600
      agaagcagct tatttgacta accagcccct ctgtggtcca ccagcgtctt ggcttggtgg      660
      gagggctctc aatcagcagg gccccaggag ggaagaagaa gtggggcaaa gcctggcctc      720
      gccgctcggg agctttgcca tctgagccac gcctcctcca ggccatgctc cttgaacttg      780
      gaaatgtcaa ccggagccct tacaccagcc ctccagcatc taatagactt gaatctactc      840
      taaacgaata tttaatccaa cctcactaca ttgtagctca gtccaacgac taaccctgaa      900
      atgggggtgt tccagccttc agcgagatgg ccaagcggtc ccctgggggc tgtggcagcg      960
      ggcttatcct tctctgttgc caaccttgcc gtccgacctc ctccgcccc atgcggtgac       1020
      cccgtccgtg tctgtgtctg tccatacgtg tgagtccagc taaaaagaca aaacagaacc     1080
      cgtgggccca gctcggaagg tgcgtggaga aggctccgac gtctccgaag tgcagccctt     1140
      gggatggcat tccgttgtgt gccttattcc tggagaatct gtatacggct cgcctataga    1200
      aatatagcct cttcatgctg tattaaaagg actttttaaa gcaaaaaaaa aaaaaaaaaa     1260
      cttgaggggg ggnccggtac ccaattntc                                       1289


<210> 320
<211> 22
<212> PRT
<213> Homo sapiens

<400> 320
Met Phe Leu Ile Phe Val Tyr Phe Leu Lys Ile Leu Phe Ser Ser Ser
  1               5                  10                  15

Leu Pro Phe Leu Trp Leu
            20


<210> 321
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<211> 128
<212> PRT
<213> Homo sapiens

<400> 321
Met Met Phe Leu Thr Gln Gly Gly Pro Leu Pro Ser Thr Arg Ala Arg
 1   5   10   15

Pro Thr Cys Gln Ala Gly Ala Leu Pro Lys Pro Ser Gly Leu Leu Gly
            20   25   30

Val Thr Cys Trp Asn Gly Leu Lys Gly Pro Leu Cys Gly Asn Arg Cys
            35   40   45

Ser Pro Asn Thr Leu Leu Leu Ala Ala Arg Gln Ala Leu Trp Lys Gly
        50   55   60

Arg Gly Arg Thr His Gln Asp Leu Pro Gly Pro Leu Gln Gly Arg Gln
65   70   75   80

Leu Gly Pro Glu Pro Lys His Leu Ala Leu Leu Pro Pro Arg Gly Gln
                85   90   95

Glu Ala Ser Trp Ala Ser Ser Leu Pro Gly Gln Gly Pro Leu Pro Leu
            100   105   110

Pro His Ile Asn Cys Thr Val Phe Ser Leu Lys Ala Ser Phe Ile Lys
        115   120   125

<210> 322
<211> 28
<212> PRT
<213> Homo sapiens

<400> 322
Met Gln Phe Leu Leu Thr Ala Phe Leu Leu Val Pro Leu Leu Ala Leu
 1   5   10   15

Cys Asp Val Pro Ile Ser Leu Gly Phe Ser Pro Ser
            20   25

<210> 323
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 323
Met Asp Gly Phe Ser Ser Arg Leu Phe Ser Ser Leu Pro Phe Val Ala
1   5   10   15

Leu Gln Trp Phe Ile Val Ile Ser His Leu Leu Ser Leu Ser Leu Ser
            20   25   30

Ala Cys Cys Tyr Gln Thr His Cys Ser Leu Xaa Gln Leu Ser Ser Ala
        35   40   45

Phe Ser Xaa Met Gly Glu Ser Cys Val Gly Glu Arg Glu Tyr Xaa Phe
    50   55   60

<210> 324
<211> 21
<212> PRT
<213> Homo sapiens

<400> 324
Met Pro Leu Ile Asn Leu Leu Leu Leu Tyr Tyr Val Pro Asn Gly Gly
1   5   10   15

Lys Gln Asp Lys Lys
            20

<210> 325
<211> 39
<212> PRT
<213> Homo sapiens

<400> 325
Met Gly Arg His Leu Val Leu Val Met Phe Ile Thr Thr Ser Leu His
1   5   10   15

Ser Gly Thr Pro Val Pro Glu Asn Val Ile Cys Gly Val Thr Lys Gly
            20   25   30

Pro Gln Gly Lys Lys Lys Lys
        35

<210> 326
<211> 33
<212> PRT
<213> Homo sapiens

<400> 326
Met Leu Trp Trp Ser Arg Asp Tyr Thr Met Val Phe Leu Leu Phe Thr
1   5   10   15

Met Val Phe Thr Gly Asp Leu Val Ile Arg Gly Arg Thr Glu Leu Ser
            20   25   30

Leu

<210> 327
<211> 88
<212> PRT
<213> Homo sapiens

<400> 327
Met Val Cys Ser Ser Leu Cys Asp Ile Gly Gly Ile Ile Thr Pro Phe
1   5   10   15

Ile Val Phe Arg Leu Arg Glu Val Trp Gln Ala Leu Pro Leu Ile Leu
            20   25   30

Phe Ala Val Leu Gly Leu Leu Ala Ala Gly Val Thr Leu Leu Leu Pro
        35   40   45

Glu Thr Lys Gly Val Ala Leu Pro Glu Thr Met Lys Asp Ala Glu Asn
    50   55   60

Leu Gly Arg Lys Ala Lys Pro Lys Glu Asn Thr Ile Tyr Leu Lys Val
65   70   75   80

Gln Thr Ser Glu Pro Ser Gly Thr
                85

<210> 328
<211> 23
<212> PRT
<213> Homo sapiens

<400> 328
Met Gln Pro Gly Ala Gly Val Leu Val Leu Gly Leu Leu Leu Pro Pro
1   5   10   15

Pro Gln Ser Pro Ser Leu Ser
            20

<210> 329
<211> 27
<212> PRT
<213> Homo sapiens

<400> 329
Met Thr Phe Thr Leu Gly Asp Ser Gln Val Leu Leu Ile Asn Leu Phe
1   5   10   15

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Pro Ser Met Pro Ser Gly Ser Cys Ala Arg Pro
            20                  25
```

<210> 330
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals stop translation

<400> 330
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Met Cys Leu Glu Cys Trp Ala Glu Asn Leu Gly Pro His His Thr Ser
  1               5                  10                  15
Ser Leu Leu Asn Pro Arg His Leu Pro Ser Ile Pro Ala Met Phe Pro
            20                  25                  30
Val Ser Ser Gly Cys Phe Gln Glu Gln Gln Glu Met Asn Lys Ser Leu
            35                  40                  45
Val Ser Cys Leu Phe Val Leu His Phe Val Leu His Cys Ile Phe Xaa
      50                  55                  60
```

<210> 331
<211> 196
<212> PRT
<213> Homo sapiens

<400> 331
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Met Leu Ser Thr Ser Glu Tyr Ser Gln Ser Pro Lys Met Glu Ser Leu
  1               5                  10                  15
Ser Ser His Arg Ile Asp Glu Asp Gly Glu Asn Thr Gln Ile Glu Asp
            20                  25                  30
Thr Glu Pro Met Ser Pro Val Leu Asn Ser Lys Phe Val Pro Ala Glu
            35                  40                  45
Asn Asp Ser Ile Leu Met Asn Pro Ala Gln Asp Gly Glu Val Gln Leu
      50                  55                  60
Ser Gln Asn Asp Asp Lys Thr Lys Gly Asp Asp Thr Asp Thr Arg Asp
65                  70                  75                  80
Asp Ile Ser Ile Leu Ala Thr Gly Cys Lys Gly Arg Glu Glu Thr Val
                85                  90                  95
Ala Glu Glu Val Cys Ile Asp Leu Thr Cys Asp Ser Gly Ser Gln Ala
            100                 105                 110
```

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Val Pro Ser Pro Ala Thr Arg Ser Glu Ala Leu Ser Ser Val Leu Asp
        115                 120                 125

Gln Glu Glu Ala Met Glu Ile Lys Glu His His Pro Glu Glu Gly Ser
    130                 135                 140

Ser Gly Ser Glu Val Glu Glu Ile Pro Glu Thr Pro Cys Glu Ser Gln
145                 150                 155                 160

Gly Glu Glu Leu Lys Glu Glu Asn Met Glu Ser Val Pro Leu His Leu
                165                 170                 175

Ser Leu Thr Glu Thr Gln Ser Gln Gly Leu Cys Leu Arg Arg His Pro
                180                 185                 190

Lys Lys Lys Lys
        195
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<210> 332
<211> 252
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (252)
<223> Xaa equals stop translation

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<400> 332
Met Gly Gly Asp Leu Val Leu Gly Leu Gly Ala Leu Arg Arg Arg Lys
  1               5                  10                  15

Arg Leu Leu Glu Gln Glu Lys Ser Leu Ala Gly Trp Ala Leu Val Leu
              20                  25                  30

Ala Xaa Xaa Gly Ile Gly Leu Met Val Leu His Ala Glu Met Leu Trp
```

```
               35                    40                      45
      Phe Gly Gly Cys Ser Ala Val Asn Ala Thr Gly His Leu Ser Asp Thr
          50                  55                  60

      Leu Trp Leu Ile Pro Ile Thr Phe Leu Thr Ile Gly Tyr Gly Asp Val
      65                  70                  75                      80

      Val Pro Gly Thr Met Trp Gly Lys Ile Val Cys Leu Cys Thr Gly Val
                      85                  90                  95

      Met Gly Val Cys Cys Thr Ala Leu Leu Ala Val Val Ala Arg Lys
                  100                 105                 110

      Leu Glu Phe Asn Lys Ala Glu Lys His Val His Asn Phe Met Met Asp
                  115                 120                 125

      Ile Gln Tyr Thr Lys Glu Met Lys Glu Ser Ala Ala Arg Val Leu Gln
          130                 135                 140

      Glu Ala Trp Met Phe Tyr Lys His Thr Arg Arg Lys Glu Ser His Ala
      145                 150                 155                     160

      Ala Arg Xaa His Gln Arg Xaa Leu Leu Ala Ala Ile Asn Ala Phe Arg
                      165                 170                 175

      Gln Val Arg Leu Lys His Arg Lys Leu Arg Glu Gln Val Asn Ser Met
                  180                 185                 190

      Val Asp Ile Ser Lys Met His Met Ile Leu Tyr Asp Leu Gln Gln Asn
              195                 200                 205

      Leu Ser Ser Ser His Arg Ala Leu Glu Lys Gln Ile Asp Thr Leu Ala
          210                 215                 220

      Gly Lys Leu Asp Ala Leu Thr Glu Leu Leu Ser Thr Ala Leu Gly Pro
      225                 230                 235                     240

      Arg Gln Leu Pro Glu Pro Ser Gln Gln Ser Lys Xaa
                      245                 250


<210> 333
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (68)
<223> Xaa equals stop translation

<400> 333
Met Trp Arg Cys Arg Gly Lys Leu Ser Phe Pro Leu Phe Ala Val Val
  1               5                   10                  15

Ile Val Ser Cys Arg Lys Asp Gly Pro Asp Ala Ala Ala Ala Pro Ala
              20                  25                  30
```

```
Val Ile Lys Asn Asn Ser His Tyr Gln Thr Ser Lys Ala Leu Glu Leu
         35                  40                  45

Glu Lys Thr Thr Glu Asn Lys Glu Ser Asn Pro Phe Ile Leu Gln Val
     50                  55                  60

Asn Lys Leu Xaa
 65


<210> 334
<211> 84
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (84)
<223> Xaa equals stop translation

<400> 334
Met Gly Glu Gly Lys Asn Gly Phe Gly Gly Phe Val His Thr Ala Asp
 1               5                  10                  15

Ala Cys Trp Glu Gly Val His Ser Glu Pro Val Cys Arg Thr Val His
             20                  25                  30

Thr Val His Thr Cys His His Gln Ala Phe Leu Val Leu Ile Gly Trp
         35                  40                  45

Ser Lys Ser Gly Lys Glu Arg Lys Glu Ala Phe Leu Thr Ala Ile Ile
     50                  55                  60

Leu Asn Ser Arg Ser Ile His Ile Ser Cys Ser Trp Pro Pro Ser Pro
 65                  70                  75                  80

Val Pro Gln Xaa



<210> 335
<211> 36
<212> PRT
<213> Homo sapiens

<400> 335
Met Leu Leu Ile Asn Leu Leu Trp Leu Val Thr Met Ile Lys Ser Val
 1               5                  10                  15

Ile Asn Asn Asn Ile Ile Leu Phe Leu Lys Lys Lys Ser Leu Phe Phe
             20                  25                  30

Ile Asp Ser Val
         35


<210> 336
```

```
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (63)
<223> Xaa equals stop translation

<400> 336
Met Thr Phe Pro Phe Glu Lys Lys Ile Val Ala Phe Ser Ala Phe Tyr
 1               5                   10                  15

Leu Ile Pro Gly Glu Ser Arg Leu Ala Pro Thr Phe Asn Pro Ser Ala
            20                  25                  30

Asp Met Thr Val Ile Leu Arg Gly Arg Ala Gln His Lys Thr Ala Met
            35                  40                  45

Leu Glu Ser Tyr Asn Trp Lys Val Ser Cys Gln Leu Arg Glu Xaa
        50                  55                  60


<210> 337
<211> 35
<212> PRT
<213> Homo sapiens

<400> 337
Met His Ser Lys Gly Ser Ser Leu Leu Leu Phe Leu Pro Gln Leu Ile
 1               5                   10                  15

Leu Ile Leu Pro Val Cys Ala His Leu His Glu Glu Leu Asn Cys Cys
            20                  25                  30

Phe His Arg
        35


<210> 338
<211> 23
<212> PRT
<213> Homo sapiens

<400> 338
Met Gly Ala Leu Val Leu Leu Leu Cys Leu Leu Val Gly Val Gln Gln
 1               5                   10                  15

Ser Gly Ser Val Trp Asp Ser
                20


<210> 339
<211> 40
<212> PRT
<213> Homo sapiens

<400> 339
```

```
Met Gln Ser Ala Glu Ile Leu Ser Trp Thr Asp Val Leu His Asp Phe
 1               5                  10                  15

Leu Phe Ser Leu Phe Leu Trp Pro Ala Phe Glu Asp Arg Ala Leu Leu
            20                  25                  30

Ile Phe Thr Leu Asn Gln Ile Val
        35                  40
```

<210> 340
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (111)
<223> Xaa equals stop translation

<400> 340

```
Met Gln Ser Leu Val Gln Trp Gly Leu Asp Ser Tyr Asp Tyr Leu Gln
 1               5                  10                  15

Asn Ala Pro Pro Gly Phe Phe Pro Arg Leu Gly Val Ile Gly Phe Ala
            20                  25                  30

Gly Leu Ile Gly Leu Leu Leu Ala Arg Gly Ser Lys Ile Lys Lys Leu
        35                  40                  45

Val Tyr Pro Pro Gly Phe Met Gly Leu Ala Ala Ser Leu Tyr Tyr Pro
    50                  55                  60

Gln Gln Ala Ile Val Phe Ala Gln Val Ser Glu Arg Leu Tyr Asp
 65                  70                  75                  80

Trp Gly Leu Arg Gly Tyr Ile Val Ile Glu Asp Leu Trp Lys Glu Asn
                85                  90                  95

Phe Gln Lys Pro Gly Asn Val Lys Asn Ser Pro Gly Thr Lys Xaa
            100                 105                 110
```

<210> 341
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 341
Met Ala Pro Ser Leu Leu Leu Leu Ala Pro Leu Cys Ser Leu Glu Ala
 1               5                   10                  15

Val Leu Ser Ser Pro Leu Glu Lys Gln Cys Gln Leu Pro Gly Ile Phe
            20                  25                  30

Cys Gln Leu Gln Leu Pro Cys Pro Leu Leu Leu Ser Ala Gln Leu Leu
        35                  40                  45

Lys Gly Ile Val Xaa Pro Arg Cys Pro Ala Ser Leu Pro Gln Pro Pro
    50                  55                  60

His Pro Ala Pro Ser Trp His Leu Pro Leu His Cys Thr Glu Arg Xaa
65                  70                  75                  80

Pro His His Leu Pro Leu Gln Gly Gly Ser Ser Asn Met Glu Glu Xaa
                85                  90                  95

Asn Tyr Arg Gly Tyr Xaa Asp Ala Gln Leu
            100                 105


<210> 342
<211> 50
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals stop translation

<400> 342
Met Thr Thr Cys Leu Phe Gly Leu Leu Ser Cys Glu Met Ser Ala Gln
 1               5                   10                  15

Val Ser Gln Lys Ser Cys Val Tyr Asp Glu Ser Glu Cys Phe Ser Ser
            20                  25                  30

Val Gly Gln Leu Leu Ala Leu Leu Ile Leu Val Tyr Val Leu Pro Ser
        35                  40                  45

Ile Xaa
    50


<210> 343
```

```
<211> 48
<212> PRT
<213> Homo sapiens

<400> 343
Met Leu Trp Lys Cys Ser Gln Asn Ile Ala Arg Cys Leu Leu Leu Leu
  1               5                  10                  15

Leu Ala Leu Val Glu Ile Lys Leu Glu Asp Leu Gln Ser Gln Leu His
              20                  25                  30

Pro Thr Trp Lys Ser Ile Pro Gly Pro Ser Pro Arg Asn Gln His Arg
          35                  40                  45
```

```
<210> 344
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals stop translation

<400> 344
Met Leu Ile Pro Leu Gln Cys Leu Phe Ser Ser Asp Arg Met Leu Thr
  1               5                  10                  15

Phe Leu Thr Pro Trp Gln Lys Gly Glu Lys Cys Val Leu Gly Trp Val
              20                  25                  30

Thr Lys Phe Leu Ser Glu Ile Ser Xaa
          35                  40
```

```
<210> 345
<211> 76
<212> PRT
<213> Homo sapiens

<400> 345
Met Thr Phe Ser Ser Leu Lys Leu Phe Val Leu Thr Cys Ile Ile Lys
  1               5                  10                  15

Gly Leu Glu Arg Phe Ile Ile Leu Arg Glu Val Cys Asn Gln Glu Ile
              20                  25                  30

Gln Arg Ser Leu Ser Ser Asn Leu Val His Val Leu Leu Gln Pro Ala
          35                  40                  45

Thr Phe Lys Asp Val Leu Val Thr Glu Ile Ile Cys Leu Cys Met Cys
      50                  55                  60

Leu Tyr Ser Ile Lys Tyr Met Pro Pro Gln Lys Lys
```

65   70   75

<210> 346
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 346
Met Ala Gly Ala Ser Leu Gly Ala His Arg Ala Phe Gly Gly Leu Arg
 1   5   10   15

Val Leu Thr Phe Asp Phe Leu Gln Val Gly Gly Lys Pro Asp His Asp
             20   25   30

Asp Gln Ser Leu His Ile Leu Asp Leu His Gly Ala Asp Pro Ala Leu
         35   40   45

Pro Gly Ser His Gln Val Tyr Ala Thr Thr Phe Cys Ser Lys Phe Arg
     50   55   60

Ile Arg Val Thr Ser Gly Glu His Cys Pro Gln Xaa Asn Ala Asn Gly
 65   70   75   80

Leu Ala Ala

<210> 347
<211> 42
<212> PRT
<213> Homo sapiens

<400> 347
Met Ala Lys Ile Ser Pro Phe Glu Val Val Lys Arg Thr Ser Val Pro
 1   5   10   15

Val Leu Val Gly Leu Val Ile Val Ile Val Ala Thr Glu Leu Met Val
             20   25   30

Pro Gly Thr Ala Ala Ala Val Thr Gly Lys
         35   40

<210> 348
<211> 26
<212> PRT
<213> Homo sapiens

<400> 348
Met Arg Leu Phe Phe Ile Gly Phe Leu Leu Leu Phe Ser Phe Gly Leu
 1   5   10   15

Leu Arg Gln Pro Ser Leu Ser Ala Glu His
          20   25

<210> 349
<211> 26
<212> PRT
<213> Homo sapiens

<400> 349
Met Val Phe Ser Val Ser Ser Ala Leu Ala Leu Leu Leu Met Leu Leu
 1   5   10   15

Arg Ser Ser Asp Leu Ala Lys Lys Thr Glu
          20   25

<210> 350
<211> 157
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (157)
<223> Xaa equals stop translation

<400> 350
Met Ser Leu Glu Phe Tyr Gln Lys Lys Lys Ser Arg Trp Pro Phe Ser
 1   5   10   15

Asp Glu Cys Ile Pro Trp Glu Val Trp Thr Val Lys Val His Val Val
              20   25   30

Ala Leu Ala Thr Glu Gln Glu Arg Gln Ile Cys Arg Glu Lys Val Gly
          35   40   45

Glu Lys Leu Cys Glu Lys Ile Ile Asn Ile Val Glu Val Met Asn Arg
      50   55   60

His Glu Tyr Leu Pro Lys Met Pro Thr Gln Ser Glu Val Asp Asn Val
 65   70   75   80

Phe Asp Thr Gly Leu Arg Asp Val Gln Pro Tyr Leu Tyr Lys Ile Ser
              85   90   95

Phe Gln Ile Thr Asp Ala Leu Gly Thr Ser Val Thr Thr Thr Met Arg
              100   105   110

Arg Leu Ile Lys Asp Thr Leu Pro Ser Glu Arg Arg Trp Ile Ser Gly
          115   120   125

Ser Ser Leu Met Ala Pro Arg Pro Trp Leu Leu Gly Ile Ala Leu Leu
      130   135   140

Gly Leu Trp Ala Leu Glu Pro Ala Leu Gly His Trp Xaa
145   150   155

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<210> 351
<211> 520
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (385)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (520)
<223> Xaa equals stop translation

<400> 351
Met Phe Leu Leu Pro Leu Pro Ala Ala Gly Arg Val Val Val Arg Arg
1               5                   10                  15

Leu Ala Val Arg Arg Phe Gly Ser Arg Ser Leu Ser Thr Ala Asp Met
            20                  25                  30

Thr Lys Gly Leu Val Leu Gly Ile Tyr Ser Lys Glu Lys Glu Asp Asp
        35                  40                  45

Val Pro Gln Phe Thr Ser Ala Gly Glu Asn Phe Asp Lys Leu Leu Ala
    50                  55                  60

Gly Lys Leu Arg Glu Thr Leu Asn Ile Ser Gly Pro Pro Leu Lys Ala
65                  70                  75                  80

Gly Lys Thr Arg Thr Phe Tyr Gly Leu His Gln Asp Phe Pro Ser Val
            85                  90                  95

Val Leu Val Gly Leu Gly Lys Lys Ala Ala Gly Ile Asp Glu Gln Glu
        100                 105                 110

Asn Trp His Glu Gly Lys Glu Asn Ile Arg Ala Ala Val Ala Ala Gly
        115                 120                 125

Cys Arg Gln Ile Gln Asp Leu Glu Leu Ser Ser Val Glu Val Asp Pro
    130                 135                 140

Cys Gly Asp Ala Gln Ala Ala Ala Glu Gly Ala Val Leu Gly Leu Tyr
145                 150                 155                 160

Glu Tyr Asp Asp Leu Lys Gln Lys Lys Met Ala Val Ser Ala Lys
            165                 170                 175

Leu Tyr Gly Ser Gly Asp Gln Glu Ala Trp Gln Lys Gly Val Leu Phe
            180                 185                 190

Ala Ser Gly Gln Asn Leu Ala Arg Gln Leu Met Glu Thr Pro Ala Asn
        195                 200                 205

Glu Met Thr Pro Thr Arg Phe Ala Glu Ile Ile Glu Lys Asn Leu Lys
    210                 215                 220
```

```
Ser Ala Ser Ser Lys Thr Glu Val His Ile Arg Pro Lys Ser Trp Ile
225                 230                 235                 240

Glu Glu Gln Ala Met Gly Ser Phe Leu Ser Val Ala Lys Gly Ser Asp
                245                 250                 255

Glu Pro Pro Val Phe Leu Glu Ile His Tyr Lys Gly Ser Pro Asn Ala
            260                 265                 270

Asn Glu Pro Pro Leu Val Phe Val Gly Lys Gly Ile Thr Phe Asp Ser
        275                 280                 285

Gly Gly Ile Ser Ile Lys Ala Ser Ala Asn Met Asp Leu Met Arg Ala
    290                 295                 300

Asp Met Gly Gly Ala Ala Thr Ile Cys Ser Ala Ile Val Ser Ala Ala
305                 310                 315                 320

Lys Leu Asn Leu Pro Ile Asn Ile Ile Gly Leu Ala Pro Leu Cys Glu
                325                 330                 335

Asn Met Pro Ser Gly Lys Ala Asn Lys Pro Gly Asp Val Val Arg Ala
            340                 345                 350

Lys Asn Gly Lys Thr Ile Gln Val Asp Asn Thr Asp Ala Glu Gly Arg
        355                 360                 365

Leu Ile Leu Ala Asp Ala Leu Cys Tyr Ala His Thr Phe Asn Pro Lys
    370                 375                 380

Xaa Ile Leu Asn Ala Ala Thr Leu Thr Gly Ala Met Asp Val Ala Leu
385                 390                 395                 400

Gly Ser Gly Ala Thr Gly Val Phe Thr Asn Ser Ser Trp Leu Trp Asn
                405                 410                 415

Lys Leu Phe Glu Ala Ser Ile Glu Thr Gly Asp Arg Val Trp Arg Met
            420                 425                 430

Pro Leu Phe Glu His Tyr Thr Arg Gln Val Val Asp Cys Gln Leu Ala
        435                 440                 445

Asp Val Asn Asn Ile Gly Lys Tyr Arg Ser Ala Gly Ala Cys Thr Ala
    450                 455                 460

Ala Ala Phe Leu Lys Glu Phe Val Thr His Pro Lys Trp Ala His Leu
465                 470                 475                 480

Asp Ile Ala Gly Val Met Thr Asn Lys Asp Glu Val Pro Tyr Leu Arg
                485                 490                 495

Lys Gly Met Thr Gly Arg Pro Thr Arg Thr Leu Ile Glu Phe Leu Leu
            500                 505                 510

Arg Phe Ser Gln Asp Asn Ala Xaa
        515                 520
```

<210> 352
<211> 39
<212> PRT
<213> Homo sapiens

<400> 352
Thr Ile Leu Phe Leu Phe Leu Gln Leu Ser Ala Leu Arg Leu Ile Val
1   5   10   15

Gly Lys Asp Ser Ile Asp Ile Asp Ile Ser Ser Arg Arg Arg Glu Asp
            20   25   30

Gln Ser Leu Arg Leu Asn Ala
        35

<210> 353
<211> 234
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (234)
<223> Xaa equals stop translation

<400> 353
Met Thr Ser Glu Leu Asp Ile Phe Val Gly Asn Thr Thr Leu Ile Asp
1   5   10   15

Glu Asp Val Tyr Arg Leu Trp Leu Asp Gly Tyr Ser Val Thr Asp Ala
            20   25   30

Val Ala Leu Arg Val Arg Ser Gly Ile Leu Glu Gln Thr Gly Ala Thr
        35   40   45

Ala Ala Val Leu Gln Ser Asp Thr Met Asp His Tyr Arg Thr Phe His
    50   55   60

Met Leu Glu Arg Leu Leu His Ala Pro Pro Lys Leu Leu His Gln Leu
65   70   75   80

Ile Phe Gln Ile Pro Pro Ser Arg Gln Ala Leu Leu Ile Glu Arg Tyr
                85   90   95

Tyr Ala Phe Asp Glu Ala Phe Val Arg Glu Val Leu Gly Lys Lys Leu
            100   105   110

Ser Lys Gly Thr Lys Lys Asp Leu Asp Asp Ile Ser Thr Lys Thr Gly
        115   120   125

Ile Thr Leu Lys Ser Cys Arg Arg Gln Phe Asp Asn Phe Lys Arg Val
        130   135   140

Phe Lys Val Val Glu Glu Met Arg Gly Ser Leu Val Asp Asn Ile Gln
145   150   155   160

```
Gln His Phe Leu Leu Ser Asp Arg Leu Ala Arg Asp Tyr Ala Ala Ile
            165                 170                 175

Val Phe Phe Ala Asn Asn Arg Phe Glu Thr Gly Lys Lys Lys Leu Gln
            180                 185                 190

Tyr Leu Ser Phe Gly Asp Phe Ala Phe Cys Ala Glu Leu Met Ile Gln
        195                 200                 205

Asn Trp Thr Leu Gly Pro Val Asp Ser Gln Met Asp Asp Met Asp Met
    210                 215                 220

Asp Leu Asp Arg Asn Phe Ser Arg Thr Xaa
225                 230


<210> 354
<211> 169
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (169)
<223> Xaa equals stop translation

<400> 354
Met Ala Ala Ala Val Ala Gly Met Leu Arg Gly Gly Leu Leu Pro Gln
  1               5                  10                  15

Ala Gly Arg Leu Pro Thr Leu Gln Thr Val Arg Tyr Gly Ser Lys Ala
            20                  25                  30

Val Thr Arg His Arg Arg Val His Phe Gln Arg Gln Lys Leu Met
        35                  40                  45

Ala Val Thr Glu Tyr Ile Pro Pro Lys Pro Ala Ile His Pro Ser Cys
    50                  55                  60

Leu Pro Ser Pro Pro Ser Pro Pro Gln Glu Glu Ile Gly Leu Ile Arg
65                  70                  75                  80

Leu Leu Arg Arg Glu Ile Ala Ala Val Phe Gln Asp Asn Arg Met Ile
            85                  90                  95

Ala Val Cys Gln Asn Val Ala Leu Ser Ala Glu Asp Lys Leu Leu Ile
            100                 105                 110

Ala Thr Pro Ala Ala Glu Thr Gln Asp Pro Asp Glu Gly Leu Pro Gln
        115                 120                 125

Pro Gly Pro Glu Ser Pro Ser Trp Arg Ile Pro Ser Thr Lys Ile Cys
    130                 135                 140

Cys Pro Phe Leu Trp Gly Thr Thr Cys Cys Trp Ser Val Lys Ser Pro
145                 150                 155                 160

Arg Ser Arg Arg Trp Tyr Gly Ser Xaa
```

165

<210> 355
<211> 43
<212> PRT
<213> Homo sapiens

<400> 355
Met Lys Arg Ser Phe Leu Leu Pro Leu Leu Leu Val Gly Phe Leu Asp
1   5   10   15

Thr Ala His Leu Ile Leu Leu Glu Thr Leu Ser Val Cys Leu Trp Leu
            20   25   30

Pro Ser Leu Ile Asp Ser Arg Cys Val Met Ser
        35   40

<210> 356
<211> 78
<212> PRT
<213> Homo sapiens

<400> 356
Met Lys Glu Gly Pro Pro Cys Lys Arg His His Tyr Tyr Gln Asn Cys
1   5   10   15

Gly Ala Lys Leu Leu Val Ser Leu Phe Gly Glu Thr Asn Gln Ile His
            20   25   30

Leu Leu Glu Thr Gln Val Gly Thr Glu Lys Gly Gly Glu Arg Ile Trp
        35   40   45

Glu Glu Lys Trp Arg Ile Ser Ser Thr Val Leu Phe Ile Ser Val Asn
    50   55   60

Ser Tyr Val Glu Gly Ser Val Leu Glu Ile Lys Leu Phe Tyr
65   70   75

<210> 357
<211> 24
<212> PRT
<213> Homo sapiens

<400> 357
Met Ser Glu Ile Leu Ser Leu Leu Phe Cys Leu Leu Gly Pro Ala Leu
1   5   10   15

Asp Glu Arg Arg Glu Glu Lys Asp
            20

<210> 358
<211> 274
<212> PRT
<213> Homo sapiens

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<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (178)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (226)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (229)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (274)
<223> Xaa equals stop translation

<400> 358
Met Ser Ser Ala Gly Thr Ala Thr Pro Leu Glu Met Asp His Lys Leu
 1               5                   10                  15

Thr Ser Gln Pro Gly Arg Pro Ser Phe Tyr Cys Asn Ser Arg His Ser
            20                  25                  30

Ile Val Gly Ser Ser His Gln Leu Gly Phe Trp Phe Ser His Leu Glu
            35                  40                  45

Ser Ser Gly Leu Lys Val Phe Gln Val Ser Leu Pro Cys Glu Cys Val
        50                  55                  60

Asn Leu Pro Thr Arg Ile Ala Ser Val Val Leu Ser Leu Met Ser Leu
65                  70                  75                  80

Leu Val Val Gly Gln Ala Pro Ala Trp Glu Gly Ser Leu Leu Arg Gly
                85                  90                  95

Arg Pro Ala Gly Gly Ala His Leu Cys Ala Met Xaa Val Ile Glu Gly
            100                 105                 110

Leu Val Val Asp Val Gly Glu Arg Ile Leu His Gly Gln Arg Glu Val
        115                 120                 125

Gly Gln Val Ser Gln Val Leu Pro Ala Leu Ser Leu Gly Leu Val Phe
    130                 135                 140
```

```
Leu Cys Gln Gly Thr Val Glu Lys Val Ser Gly Ala Ala His Cys Ser
145                 150                 155                 160

Ser Leu Leu Cys Cys Leu Pro Trp Gln Cys Ser Gly Gly Gly Phe Pro
                165                 170                 175

Thr Xaa Arg Cys Ser Arg Pro Tyr Phe Ser Ser His Lys Gly Val Ala
            180                 185                 190

Ala Thr Leu Ala Leu Thr Cys His Cys Asp Lys Val His Val Ala Gly
        195                 200                 205

Leu Gly Lys Asp Trp Ala Ile Glu Gln Arg Arg Thr Cys Glu Ser
    210                 215                 220

Asp Xaa Glu Xaa Xaa Pro Phe Thr Leu Ala Gly Leu Val Leu Val Leu
225                 230                 235                 240

Arg Phe Cys Gln Val Val Leu Val Trp Ile Pro Gln Leu Gly Asp Lys
                245                 250                 255

His Trp Arg Gly Met Thr Arg Leu Gly Arg Val Ser Leu Thr Ser Ser
            260                 265                 270

Ile Xaa


<210> 359
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals stop translation

<400> 359
Met Ile Phe Thr Ser Val Thr Lys Gly Ile Leu Leu Ile Ala Leu Trp
  1               5                   10                  15

Val Pro Leu Phe His Phe Met Leu Ile Asp Ser Ile Leu Gly Pro Ser
                20                  25                  30

Arg Leu Leu Thr Asp Gly Val Pro Phe Asn Pro Trp His Val Xaa
            35                  40                  45


<210> 360
<211> 117
<212> PRT
<213> Homo sapiens

<400> 360
Met Trp Leu Leu Ser Ala Ile Leu Trp Ala Ser Leu Trp Met Ala Arg
  1               5                   10                  15
```

Met Ala Ser Arg Ser Leu Ser Ala Ser Gly Arg Val Asp Leu Asn Trp
              20   25   30

Ser Trp Ala Glu Ile Arg Pro Ser Ile Ser Ser Met Val Trp Thr Met
          35   40   45

Asn Met Ser Trp Arg Ser Ser Met Ala Leu Ser Ile Gln Leu Leu Lys
        50   55   60

Gly Ala Ala Arg Leu Ala Tyr Ser Arg Cys Ser Trp Ser Met Ala Ser
65   70   75   80

Ser Cys Phe Ser Val Phe Ser Arg Ala Ser Leu Arg Leu Cys Val Arg
                85   90   95

Glu Pro Arg Ala Ser His Trp Ser Gln Ile Phe Trp His Arg Val Leu
            100   105   110

Thr Leu Trp Glu Ser
        115

<210> 361
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 361
Met Ser Ile Ser Gly Thr Asp Gly Leu Ile Leu Leu Leu Val Gly Leu
 1   5   10   15

Glu Ala Xaa Val Arg Ser Ser Lys Lys Trp Ile Pro Lys Ala Leu Xaa
            20   25   30

Val Thr Gln Ala Lys Trp Asn Ser Trp Pro Ser Arg Arg Asn Ala Gly
          35   40   45

Phe Ala Leu His
        50

<210> 362
<211> 132
<212> PRT
<213> Homo sapiens

<220>

```
<221> SITE
<222> (132)
<223> Xaa equals stop translation

<400> 362
Met Glu His Cys Leu Tyr His Ser Val His Gly Ile Asn Pro Tyr Ile
 1               5                   10                  15

His Lys Asn Thr His Pro Ser Ile Asn Ile Tyr Met Val Trp Asp Glu
            20                  25                  30

Gln Val Asn Ser Phe Glu Arg Glu Phe Pro Phe Phe Phe Leu Ile
        35                  40                  45

Ile Leu Leu Asn Cys Cys Gln Leu Ser Asn Lys Gln Thr Glu Lys Leu
    50                  55                  60

Phe Gly Lys Thr Leu His Thr Pro Phe Leu Ser Ser Ala Leu Lys Tyr
65                  70                  75                  80

Arg Leu Asn Thr His Ile Leu Pro Val Phe Ser Tyr Ser Asp Ser Ile
            85                  90                  95

Leu Thr Cys His Leu Ile Leu Ala Ser Tyr Phe Ser His Val Tyr Leu
            100                 105                 110

Pro Val Thr Cys Ile Cys Tyr Leu Asn Arg Lys Lys Asn Ile Gln Lys
            115                 120                 125

Lys Lys Asn Xaa
    130


<210> 363
<211> 204
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (204)
<223> Xaa equals stop translation

<400> 363
Met Gly Ser Arg Asp His Leu Phe Lys Val Leu Val Val Gly Asp Ala
 1               5                   10                  15

Ala Val Gly Lys Thr Ser Leu Val Gln Asp Tyr Ser Gln Asp Ser Phe
            20                  25                  30

Ser Lys His Tyr Lys Ser Thr Val Gly Val Asp Phe Ala Leu Lys Val
        35                  40                  45

Leu Gln Trp Ser Asp Tyr Glu Ile Val Arg Leu Gln Leu Trp Asp Ile
    50                  55                  60

Ala Gly Gln Glu Arg Phe Thr Ser Met Thr Arg Leu Tyr Tyr Arg Asp
65                  70                  75                  80
```

```
Ala Ser Ala Cys Val Ile Met Phe Asp Val Thr Asn Ala Thr Thr Phe
                 85                  90                  95

Ser Asn Ser Gln Arg Trp Lys Gln Asp Leu Asp Ser Lys Leu Thr Leu
                100                 105                 110

Pro Asn Gly Glu Pro Val Pro Cys Leu Leu Leu Ala Asn Lys Cys Asp
            115                 120                 125

Leu Ser Pro Trp Ala Val Ser Arg Asp Gln Ile Asp Arg Phe Ser Lys
        130                 135                 140

Glu Asn Gly Phe Thr Gly Trp Thr Glu Thr Ser Val Lys Glu Asn Lys
        145                 150                 155                 160

Asn Ile Asn Glu Ala Met Arg Val Leu Ile Glu Lys Met Met Arg Asn
                165                 170                 175

Ser Thr Glu Asp Ile Met Ser Leu Ser Thr Gln Gly Asp Tyr Ile Asn
            180                 185                 190

Leu Gln Thr Lys Ser Ser Ser Trp Ser Cys Cys Xaa
        195                 200
```

<210> 364
<211> 47
<212> PRT
<213> Homo sapiens

<400> 364
```
Met Ile Ser Leu Ile Phe Gln Leu Glu Glu Glu Lys Leu Val Glu Lys
  1               5                  10                  15

Phe Phe Phe Phe Leu Phe Phe Phe Leu Lys Lys Gly Ser Gln Gly Ser
             20                  25                  30

Asn Leu Lys Ile Val Pro Arg His Met Arg Val Val Leu Arg Gly
         35                  40                  45
```

<210> 365
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (73)
<223> Xaa equals stop translation

<400> 365
```
Met Thr Tyr Val Thr Cys Leu His Val Cys Leu Leu Val Glu Phe Leu
  1               5                  10                  15

Asn Ser Gln Leu Thr Asn His Arg Lys Tyr Tyr Phe Leu Ser Tyr Gly
             20                  25                  30
```

Phe Trp Phe Thr Gly Leu Arg Gly Phe Ser Glu Tyr Leu Trp Pro Gln
          35   40   45

Gln His Thr Ser Phe His Pro Asn Arg Asn Glu Ile Asn Phe Val Ser
     50   55   60

Thr Asp Asn Arg Ile Trp Val Thr Xaa
 65   70

<210> 366
<211> 102
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (102)
<223> Xaa equals stop translation

<400> 366
Met Ser Asp Gln Glu Ala Lys Pro Ser Thr Glu Asp Leu Gly Asp Lys
 1   5   10   15

Lys Glu Gly Glu Tyr Ile Lys Leu Lys Val Ile Gly Gln Asp Ser Ser
               20   25   30

Glu Ile His Phe Lys Val Lys Met Thr Thr His Leu Lys Lys Leu Lys
          35   40   45

Glu Ser Tyr Cys Gln Arg Gln Gly Val Pro Met Asn Ser Leu Arg Phe
     50   55   60

Leu Phe Glu Gly Gln Arg Ile Ala Asp Asn His Thr Pro Lys Glu Leu
 65   70   75   80

Gly Met Glu Glu Glu Asp Val Ile Glu Val Tyr Gln Glu Gln Thr Gly
               85   90   95

Gly His Ser Thr Val Xaa
          100

<210> 367
<211> 48
<212> PRT
<213> Homo sapiens

<400> 367
Met Gly Phe Pro Gln Trp His Leu Gly Asn His Ala Val Glu Pro Val
 1   5   10   15

Thr Ser Ile Leu Leu Leu Phe Leu Leu Met Met Leu Gly Val Arg Gly
               20   25   30

Leu Leu Leu Val Gly Leu Val Tyr Leu Val Ser His Leu Ser Gln Arg
          35   40   45

```
<210> 368
<211> 179
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (179)
<223> Xaa equals stop translation

<400> 368
Met Ser Ala Glu Val Lys Val Thr Gly Gln Asn Gln Glu Gln Phe Leu
 1               5                   10                  15

Leu Leu Ala Lys Ser Ala Lys Gly Ala Ala Leu Ala Thr Leu Ile His
            20                  25                  30

Gln Val Leu Glu Ala Pro Gly Val Tyr Val Phe Gly Glu Leu Leu Asp
            35                  40                  45

Met Pro Asn Val Arg Glu Leu Ala Glu Ser Asp Phe Ala Ser Thr Phe
        50                  55                  60

Arg Leu Leu Thr Val Phe Ala Tyr Gly Thr Tyr Ala Asp Tyr Leu Ala
65                  70                  75                  80

Glu Ala Arg Asn Leu Pro Pro Leu Thr Glu Ala Gln Lys Asn Lys Leu
                85                  90                  95

Arg His Leu Ser Val Val Thr Leu Ala Ala Lys Val Lys Cys Ile Pro
            100                 105                 110

Tyr Ala Val Leu Leu Glu Ala Val Ala Leu Arg Asn Val Arg Gln Leu
            115                 120                 125

Glu Asp Leu Val Ile Glu Ala Val Tyr Ala Asp Val Leu Arg Gly Ser
        130                 135                 140

Leu Asp Gln Arg Asn Gln Arg Leu Glu Val Asp Tyr Ser Ile Gly Arg
145                 150                 155                 160

Asp Ile Gln Arg Gln Asp Leu Ser Ala Ile Ala Arg Thr Leu Xaa Lys
            165                 170                 175

Asn His Xaa
```

```
<210> 369
<211> 25
<212> PRT
<213> Homo sapiens

<400> 369
Met Lys Ser Ser Ser Leu Phe Phe Phe Phe Leu Ala His Phe Ile His
 1               5                   10                  15

Ser His Asp Leu Pro Gly Leu Cys Arg
            20                  25


<210> 370
<211> 224
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (224)
<223> Xaa equals stop translation

<400> 370
Met Lys Phe Ala Ala Ser Gly Xaa Phe Leu His His Met Ala Gly Leu
 1               5                   10                  15

Ser Ser Ser Lys Leu Ser Met Ser Lys Ala Leu Pro Leu Thr Lys Val
            20                  25                  30

Val Gln Asn Asp Ala Tyr Thr Ala Pro Ala Leu Pro Ser Ile Arg
            35                  40                  45

Thr Lys Ala Leu Thr Asn Met Ser Arg Thr Leu Val Asn Lys Glu Glu
    50                  55                  60

Pro Pro Lys Glu Leu Pro Ala Ala Glu Pro Val Leu Ser Pro Leu Glu
 65                 70                  75                  80

Gly Thr Lys Met Thr Val Asn Asn Leu His Pro Arg Val Thr Glu Glu
                85                  90                  95

Asp Ile Val Glu Leu Phe Cys Val Cys Gly Ala Leu Lys Arg Ala Arg
                100                 105                 110

Leu Val His Pro Gly Val Ala Glu Val Val Phe Val Lys Lys Asp Asp
            115                 120                 125
```

```
Ala Ile Thr Ala Tyr Lys Lys Tyr Asn Asn Arg Cys Leu Asp Gly Gln
    130                 135                 140

Pro Met Lys Cys Asn Leu His Met Asn Gly Asn Val Ile Thr Ser Asp
145                 150                 155                 160

Gln Pro Ile Leu Leu Arg Leu Ser Asp Ser Pro Ser Met Lys Lys Glu
                165                 170                 175

Ser Glu Leu Pro Arg Arg Val Asn Ser Ala Ser Ser Ser Asn Pro Pro
            180                 185                 190

Ala Glu Val Asp Pro Asp Thr Ile Leu Lys Ala Leu Phe Lys Ser Ser
        195                 200                 205

Gly Ala Ser Xaa Thr Thr Gln Pro Thr Glu Phe Lys Ile Lys Leu Xaa
    210                 215                 220
```

<210> 371
<211> 349
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (349)
<223> Xaa equals stop translation

<400> 371
```
Met Ser Lys Asn Cys Ile Lys Leu Leu Cys Glu Asp Pro Val Phe Ala
  1               5                  10                  15

Glu Tyr Ile Lys Cys Ile Leu Met Asp Glu Arg Thr Phe Leu Asn Asn
            20                  25                  30

Asn Ile Val Tyr Thr Phe Met Thr His Phe Leu Leu Lys Val Gln Ser
        35                  40                  45

Gln Val Phe Ser Glu Ala Asn Cys Ala Asn Leu Ile Ser Thr Leu Ile
    50                  55                  60

Thr Asn Leu Ile Ser Gln Tyr Gln Asn Leu Gln Ser Asp Phe Ser Asn
 65                  70                  75                  80

Arg Val Glu Ile Ser Lys Ala Ser Ala Ser Leu Asn Gly Asp Leu Arg
                85                  90                  95

Ala Leu Ala Leu Leu Leu Ser Val His Thr Pro Lys Gln Leu Asn Pro
            100                 105                 110

Ala Leu Ile Pro Thr Leu Gln Glu Leu Leu Ser Lys Cys Arg Thr Cys
        115                 120                 125

Leu Gln Gln Arg Asn Ser Leu Gln Glu Gln Glu Ala Lys Glu Arg Lys
```

```
        130                     135                     140
Thr Lys Asp Asp Glu Gly Ala Thr Pro Ile Lys Arg Arg Arg Val Ser
145                 150                 155                 160

Ser Asp Glu Glu His Thr Val Asp Ser Cys Ile Ser Asp Met Lys Thr
                165                 170                 175

Glu Thr Arg Glu Val Leu Thr Pro Thr Ser Thr Ser Asp Asn Glu Thr
            180                 185                 190

Arg Asp Ser Ser Ile Ile Asp Pro Gly Thr Glu Gln Asp Leu Pro Ser
        195                 200                 205

Pro Glu Asn Ser Ser Val Lys Glu Tyr Arg Met Glu Val Pro Ser Ser
    210                 215                 220

Phe Ser Glu Asp Met Ser Asn Ile Arg Ser Gln His Ala Glu Glu Gln
225                 230                 235                 240

Ser Asn Asn Gly Arg Tyr Asp Asp Cys Lys Glu Phe Lys Asp Leu His
                245                 250                 255

Cys Ser Lys Asp Ser Thr Leu Ala Glu Glu Glu Ser Glu Phe Pro Ser
            260                 265                 270

Thr Ser Ile Ser Ala Val Leu Ser Asp Leu Ala Asp Leu Arg Ser Cys
        275                 280                 285

Asp Gly Gln Ala Leu Pro Ser Gln Asp Pro Glu Val Ala Leu Ser Leu
    290                 295                 300

Ser Cys Gly His Ser Arg Gly Leu Phe Ser His Met Gln Gln His Asp
305                 310                 315                 320

Ile Leu Asp Thr Leu Cys Arg Thr Ile Glu Ser Thr Ile His Val Val
                325                 330                 335

Thr Arg Ile Ser Gly Lys Gly Asn Gln Ala Ala Ser Xaa
            340                 345
```

```
<210> 372
<211> 467
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (279)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

```
<221> SITE
<222> (341)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 372
Met Leu His Gln Asp His Ile Thr Phe Ala Met Leu Leu Ala Arg Ile
 1               5                   10                  15

Lys Leu Lys Gly Thr Val Gly Glu Pro Thr Tyr Asp Ala Glu Phe Gln
            20                  25                  30

His Phe Leu Arg Gly Asn Glu Ile Val Leu Ser Ala Gly Ser Thr Pro
        35                  40                  45

Arg Ile Gln Gly Leu Thr Val Glu Gln Ala Glu Ala Val Val Arg Leu  .
    50                  55                  60

Ser Cys Leu Pro Ala Phe Lys Asp Leu Ile Ala Lys Val Gln Ala Asp
65                  70                  75                  80

Glu Gln Phe Gly Ile Trp Leu Asp Ser Ser Ser Pro Glu Gln Thr Val
            85                  90                  95

Pro Tyr Leu Trp Ser Glu Glu Thr Pro Ala Thr Pro Ile Gly Gln Ala
            100                 105                 110

Ile His Arg Leu Leu Leu Ile Gln Ala Phe Arg Pro Asp Arg Leu Leu
        115                 120                 125

Ala Met Ala His Met Phe Val Ser Thr Asn Leu Gly Glu Ser Phe Met
    130                 135                 140

Ser Ile Met Glu Gln Pro Leu Asp Leu Thr His Ile Val Xaa Thr Glu
145                 150                 155                 160

Val Lys Pro Asn Thr Pro Val Leu Met Cys Ser Val Pro Gly Tyr Asp
            165                 170                 175

Ala Ser Gly His Val Glu Asp Leu Ala Ala Glu Gln Asn Thr Gln Ile
        180                 185                 190

Thr Ser Ile Ala Ile Gly Ser Ala Glu Gly Phe Asn Gln Ala Asp Lys
        195                 200                 205

Ala Ile Asn Thr Ala Val Lys Ser Gly Arg Trp Val Met Leu Lys Asn
    210                 215                 220

Val His Leu Ala Pro Gly Trp Leu Met Gln Leu Glu Lys Lys Leu His
225                 230                 235                 240

Ser Leu Gln Pro His Ala Cys Phe Arg Leu Phe Leu Thr Met Glu Ile
            245                 250                 255

Asn Pro Lys Val Pro Val Asn Leu Leu Arg Ala Gly Arg Ile Phe Val
            260                 265                 270

Phe Glu Pro Pro Pro Gly Xaa Lys Ala Asn Met Leu Arg Thr Phe Ser
        275                 280                 285
```

```
Ser Ile Pro Val Ser Arg Ile Cys Lys Ser Pro Asn Glu Arg Ala Arg
    290                 295                 300

Leu Tyr Phe Leu Leu Ala Trp Phe His Ala Ile Ile Gln Glu Arg Leu
305                 310                 315                 320

Arg Tyr Ala Pro Leu Gly Trp Ser Lys Lys Tyr Glu Phe Gly Glu Ser
                325                 330                 335

Asp Leu Arg Ser Xaa Cys Asp Thr Val Asp Thr Trp Leu Asp Asp Thr
                340                 345                 350

Ala Lys Gly Arg Gln Asn Ile Ser Pro Asp Lys Ile Pro Trp Ser Ala
        355                 360                 365

Leu Lys Thr Leu Met Ala Gln Ser Ile Tyr Gly Gly Arg Val Asp Asn
    370                 375                 380

Glu Phe Asp Gln Arg Leu Leu Asn Thr Phe Leu Glu Arg Leu Phe Thr
385                 390                 395                 400

Thr Arg Ser Phe Asp Ser Glu Phe Lys Leu Ala Cys Lys Val Asp Gly
                405                 410                 415

His Lys Asp Ile Gln Met Pro Asp Gly Met Gln Ala Arg Gly Val Cys
            420                 425                 430

Ala Val Gly Gly Val Ala Pro Arg His Pro Asp Ala Leu Leu Ala Gly
        435                 440                 445

Pro Ala Gln Gln Arg Arg Glu Ser Pro Pro Tyr His Thr Gly Cys Gly
    450                 455                 460

His Asp Gln
465


<210> 373
<211> 152
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (152)
<223> Xaa equals stop translation

<400> 373
Met Ala Asp Glu Ala Thr Arg Arg Val Val Ser Glu Ile Pro Val Leu
  1             5                 10                  15

Lys Thr Asn Ala Gly Pro Arg Asp Arg Glu Leu Trp Val Gln Arg Leu
```

```
            20                    25                    30
Lys Glu Glu Tyr Gln Ser Leu Ile Arg Tyr Val Glu Asn Asn Lys Asn
        35                    40                    45

Ala Asp Asn Asp Trp Phe Arg Leu Glu Ser Asn Lys Glu Gly Thr Arg
    50                    55                    60

Trp Phe Gly Lys Cys Trp Tyr Ile His Asp Leu Leu Lys Tyr Glu Phe
65                    70                    75                    80

Asp Ile Glu Phe Asp Ile Pro Ile Thr Tyr Pro Thr Thr Ala Pro Glu
                  85                    90                    95

Ile Ala Val Pro Glu Leu Asp Gly Lys Thr Ala Lys Met Tyr Arg Gly
                  100                   105                   110

Gly Lys Ile Cys Leu Thr Asp His Phe Lys Pro Leu Trp Gly Gln Glu
        115                   120                   125

Cys Ala Gln Ile Trp Thr Ser Ser Ser His Gly Ser Gly Ala Gly Ser
    130                   135                   140

Met Xaa Gly Ser Gly Asn Pro Xaa
145                   150
```

<210> 374
<211> 373
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (373)
<223> Xaa equals stop translation

<400> 374
```
Met Tyr Asp Gly Thr Lys Glu Val Pro Met Asn Pro Val Lys Ile Tyr
1                 5                   10                    15

Gln Val Cys Asp Ile Pro Gln Pro Gln Gly Ser Ile Ile Asn Pro Gly
              20                    25                    30

Ser Thr Gly Ser Ala Pro Trp Asp Glu Lys Asp Asn Asp Val Asp Glu
        35                    40                    45

Glu Asp Glu Glu Asp Glu Leu Asp Gln Ser Gln His His Val Pro Ile
        50                    55                    60

Gln Asp Thr Phe Pro Phe Leu Asn Ile Asn Gly Ser Pro Met Ala Pro
65                    70                    75                    80
```

Ala Ser Val Gly Asn Cys Ser Val Gly Asn Cys Ser Pro Glu Ala Val
           85   90   95

Trp Pro Lys Thr Glu Pro Leu Glu Met Glu Val Pro Gln Ala Pro Ile
         100   105   110

Gln Pro Phe Tyr Ser Ser Pro Glu Leu Trp Ile Ser Ser Leu Pro Met
         115   120   125

Thr Asp Leu Asp Ile Lys Phe Gln Tyr Arg Gly Lys Glu Tyr Gly Gln
   130   135   140

Thr Met Thr Val Ser Asn Pro Gln Gly Cys Arg Leu Phe Tyr Gly Asp
145   150   155   160

Leu Gly Pro Met Pro Asp Gln Glu Glu Leu Phe Gly Pro Val Xaa Leu
         165   170   175

Glu Gln Val Lys Phe Pro Gly Pro Glu His Ile Thr Asn Glu Lys Gln
         180   185   190

Lys Leu Phe Thr Ser Lys Leu Leu Asp Val Met Asp Arg Gly Leu Ile
         195   200   205

Leu Glu Val Ser Gly His Ala Ile Tyr Ala Ile Arg Leu Cys Gln Cys
   210   215   220

Lys Val Tyr Trp Ser Gly Pro Cys Ala Pro Ser Leu Val Ala Pro Asn
225   230   235   240

Leu Ile Glu Arg Gln Lys Lys Val Lys Leu Phe Cys Leu Glu Thr Phe
            245   250   255

Leu Ser Asp Leu Ile Ala His Gln Lys Gly Gln Ile Glu Lys Gln Pro
         260   265   270

Pro Phe Glu Ile Tyr Leu Cys Phe Gly Glu Glu Trp Pro Asp Gly Lys
         275   280   285

Pro Leu Glu Arg Lys Leu Ile Leu Val Gln Val Ile Pro Val Val Ala
       290   295   300

Arg Met Ile Tyr Glu Met Phe Ser Gly Asp Phe Thr Arg Ser Phe Asp
305   310   315   320

Ser Gly Ser Val Arg Leu Gln Ile Ser Thr Pro Asp Ile Lys Asp Asn
         325   330   335

Ile Val Ala Gln Leu Lys Gln Leu Tyr Arg Ile Leu Gln Thr Gln Glu
         340   345   350

Ser Trp Gln Pro Met Gln Pro Thr Pro Ser Met Gln Leu Pro Pro Ala
         355   360   365

Leu Pro Pro Gln Xaa
   370

```
<210> 375
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (83)
<223> Xaa equals stop translation

<400> 375
Met Gly Ser Ser Val Leu Pro Phe Cys Val Cys Val Thr Ser Pro Ser
 1               5                   10                  15

Leu Gly Gly Arg Cys Ile Gln Gly Arg Phe Ala Ser His Ser Lys Phe
             20                  25                  30

Trp Gly Phe Gly Arg Lys Thr Ala Ser Phe Gly Ala Val Gly Glu Thr
         35                  40                  45

Pro Pro Asp Gln Glu Pro Gln Lys Glu Thr Glu Pro Ala Thr Ser Ser
     50                  55                  60

His Ala Arg Pro Trp Ala Arg Val Ile Gly Leu Arg Ile Trp Pro Gln
 65                  70                  75                  80

Pro Asn Xaa


<210> 376
<211> 97
<212> PRT
<213> Homo sapiens

<400> 376
Met Thr Lys Lys Lys Arg Glu Asn Leu Gly Val Ala Leu Glu Ile Asp
 1               5                   10                  15

Gly Leu Glu Glu Lys Leu Ser Gln Cys Arg Arg Asp Leu Glu Ala Val
             20                  25                  30

Asn Ser Arg Leu His Ser Arg Gly Leu Ser Pro Glu Ala Arg Arg Ser
         35                  40                  45

Leu Glu Lys Glu Lys Asn Ser Leu Met Asn Lys Ala Ser Asn Tyr Glu
     50                  55                  60

Lys Glu Leu Lys Phe Leu Arg Gln Glu Asn Arg Lys Asn Met Leu Leu
 65                  70                  75                  80

Ser Val Ala Ile Phe Ile Leu Leu Thr Leu Val Tyr Ala Tyr Trp Thr
                 85                  90                  95

Met
```

<210> 377
<211> 227
<212> PRT
<213> Homo sapiens

<400> 377
Met Gly Ala Ser Ala Arg Leu Leu Arg Ala Val Ile Met Gly Ala Pro
 1   5   10   15

Gly Ser Gly Lys Gly Thr Val Ser Ser Arg Ile Thr Thr His Phe Glu
            20   25   30

Leu Lys His Leu Ser Ser Gly Asp Leu Leu Arg Asp Asn Met Leu Arg
         35   40   45

Gly Thr Glu Ile Gly Val Leu Ala Lys Ala Phe Ile Asp Gln Gly Lys
     50   55   60

Leu Ile Pro Asp Asp Val Met Thr Arg Leu Ala Leu His Glu Leu Lys
 65   70   75   80

Asn Leu Thr Gln Tyr Ser Trp Leu Leu Asp Gly Phe Pro Arg Thr Leu
                85   90   95

Pro Gln Ala Glu Ala Leu Asp Arg Ala Tyr Gln Ile Asp Thr Val Ile
            100   105   110

Asn Leu Asn Val Pro Phe Glu Val Ile Lys Gln Arg Leu Thr Ala Arg
         115   120   125

Trp Ile His Pro Ala Ser Gly Arg Val Tyr Asn Ile Glu Phe Asn Pro
     130   135   140

Pro Lys Thr Val Gly Ile Asp Asp Leu Thr Gly Glu Pro Leu Ile Gln
145   150   155   160

Arg Glu Asp Asp Lys Pro Glu Thr Val Ile Lys Arg Leu Lys Ala Tyr
                165   170   175

Glu Asp Gln Thr Lys Pro Val Leu Glu Tyr Tyr Gln Lys Lys Gly Val
            180   185   190

Leu Glu Thr Phe Ser Gly Thr Glu Thr Asn Lys Ile Trp Pro Tyr Val
         195   200   205

Tyr Ala Phe Leu Gln Thr Lys Val Pro Gln Arg Ser Gln Lys Ala Ser
     210   215   220

Val Thr Pro
225

<210> 378
<211> 79
<212> PRT
<213> Homo sapiens

<220>

```
<221> SITE
<222> (79)
<223> Xaa equals stop translation

<400> 378
Met Phe Leu Asn Cys Glu Ile Leu Glu Tyr Cys Tyr Tyr Leu Thr Gln
 1               5                  10                      15

Leu Lys Ile Ser Met Gly Lys Tyr Leu Ser Ile Pro Thr Val Leu Leu
            20                  25                  30

Lys Ile Ile Arg Cys Ser Ile Thr Ala Val Ser Asp Ser Ser Thr Ser
        35                  40                  45

Trp Ala Ile Lys Ala Gln Leu Lys Ile Glu Asn Lys Asp Leu Asp Asn
    50                  55                  60

Lys Thr Ala Lys Gly Gly Gly Gln Glu Ala Leu Thr Cys Thr Xaa
 65                  70                      75


<210> 379
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 379
Met Arg Ala Val Phe Pro Cys Cys Pro Phe Leu Thr Leu Met Leu Pro
 1               5                  10                      15

Leu Leu Glu Cys Leu Val Gly Met Ile Met Cys Tyr Leu Gly Ile Ser
            20                  25                  30

Phe Thr Asp Thr Arg Lys Thr Ala Gly Leu Lys Lys Lys Lys Lys Lys
        35                  40                  45

Lys Xaa Xaa
    50


<210> 380
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
```

<223> Xaa equals stop translation

<400> 380
Met Phe Leu Met Arg Met His Leu Cys Phe Cys Lys Tyr Cys Cys Ser
1   5   10   15

Phe Ile Val Thr Pro Thr Ser Thr Ser Asn Thr Ala Ser Tyr Leu Trp
            20   25   30

Pro Trp Ile Ser Ala Ser Met Ala Gly Arg Gly Ser Ser Trp Ala Cys
        35   40   45

Thr Leu Asn Ala Val Thr Arg Glu Gly Leu Pro Glu Xaa
    50   55   60

<210> 381
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals stop translation

<400> 381
Met Ser Leu Leu Asn Thr His Thr Leu Cys Phe Val Leu Phe Cys Phe
1   5   10   15

Thr Leu Ser Ile Asn Gln Glu Lys Leu Ala Asn His Leu Ala Phe Arg
            20   25   30

Ile Leu Phe Phe Ile Val Phe Xaa
        35   40

<210> 382
<211> 44
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals stop translation

<400> 382
Met Cys Ser Gly Gln Ser Gln Val Trp Lys Met Ala Leu Gln Ala Leu
1   5   10   15

Asp Ser Glu Thr Val Val Ile Leu Pro Asp Met His Leu Ile Leu Ser
            20   25   30

Leu Arg Leu Ile His Asn Ala Arg Pro Cys Leu Xaa
        35   40

<210> 383
<211> 203
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (203)
<223> Xaa equals stop translation

<400> 383
```
Met Leu Ile Ser Glu Glu Glu Ile Pro Phe Lys Asp Asp Pro Arg Asp
1               5                   10                  15

Glu Thr Tyr Lys Pro His Leu Glu Arg Glu Thr Pro Lys Pro Arg Arg
                20                  25                  30

Lys Ser Gly Lys Val Lys Glu Glu Lys Glu Lys Lys Glu Ile Lys Val
            35                  40                  45

Glu Val Glu Val Glu Val Lys Glu Glu Glu Asn Glu Ile Arg Glu Asp
        50                  55                  60

Glu Glu Pro Pro Arg Lys Arg Gly Arg Arg Arg Lys Asp Asp Lys Ser
65                  70                  75                  80

Pro Arg Leu Pro Lys Arg Arg Lys Lys Pro Pro Ile Gln Tyr Val Arg
                85                  90                  95

Cys Glu Met Glu Gly Cys Gly Thr Val Leu Ala His Pro Arg Tyr Leu
            100                 105                 110

Gln His His Ile Lys Tyr Gln His Leu Leu Lys Lys Lys Tyr Val Cys
        115                 120                 125

Pro His Pro Ser Cys Gly Arg Leu Phe Arg Leu Gln Lys Gln Leu Leu
    130                 135                 140

Arg His Ala Lys His His Thr Asp Gln Arg Asp Tyr Ile Cys Glu Tyr
145                 150                 155                 160

Cys Ala Arg Ala Phe Lys Ser Ser His Asn Leu Ala Val His Arg Met
                165                 170                 175

Ile His Thr Gly Glu Lys His Tyr Asn Val Arg Ser Val Asp Leu Leu
            180                 185                 190

Val Asp Lys Arg His Leu Leu Ile Gly Thr Xaa
        195                 200
```

<210> 384
<211> 29
<212> PRT
<213> Homo sapiens

<400> 384
```
Met Leu Pro Arg Arg Thr Phe Tyr Phe Tyr Phe Ile Phe Ile Phe Phe
```

```
      1              5                10               15

Leu Ala Ser Phe Trp Gly Phe Thr Leu Arg Ala Ser Phe
                  20                 25
```

<210> 385
<211> 136
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (136)
<223> Xaa equals stop translation

<400> 385

```
Met Phe Asp Ser Leu Ser Tyr Phe Lys Gly Ser Ser Leu Leu Leu Met
  1               5                10               15

Leu Lys Thr Tyr Leu Ser Glu Asp Val Phe Gln His Ala Val Val Leu
                 20                 25                30

Tyr Leu His Asn His Ser Tyr Ala Ser Ile Gln Ser Asp Asp Leu Trp
           35                 40                 45

Asp Ser Phe Asn Glu Val Thr Asn Gln Thr Leu Asp Val Lys Arg Met
     50                 55                 60

Met Lys Thr Trp Thr Leu Gln Lys Gly Phe Pro Leu Val Thr Val Gln
 65                 70                 75                 80

Lys Lys Gly Lys Glu Leu Phe Ile Gln Gln Glu Arg Phe Phe Leu Asn
                 85                 90                 95

Met Lys Pro Glu Ile Gln Pro Ser Asp Thr Arg Tyr Met Pro Ser Phe
                100                105                110

Phe Ser Cys His Leu Phe Cys Thr Leu Arg Trp Lys Tyr Phe Glu Val
           115                120                125

Phe Tyr Asn His Lys Phe Leu Xaa
     130                135
```

<210> 386
<211> 41
<212> PRT
<213> Homo sapiens

<400> 386

```
Met Ala Trp Arg Arg Arg Glu Pro Ala Ser Gly Leu Ala Ala Cys Trp
  1               5                10               15

Leu Trp Arg Cys Ser Pro Trp Pro Cys Ala Cys Pro Gly Pro Gly Ala
                 20                 25                30

Gly Leu Ser Ser Gly Ser Arg Pro Trp
```

```
<210> 387
<211> 468
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (468)
<223> Xaa equals stop translation

<400> 387
Met Glu Phe Leu Lys Val Ala Arg Arg Asn Lys Arg Glu Gln Leu Glu
 1               5                  10                  15

Gln Ile Gln Lys Glu Leu Ser Val Leu Glu Glu Asp Ile Lys Arg Val
            20                  25                  30

Glu Glu Met Ser Gly Leu Tyr Ser Pro Val Ser Glu Asp Ser Thr Val
          35                  40                  45

Pro Gln Phe Glu Ala Pro Ser Pro Ser His Ser Ser Ile Ile Asp Ser
     50                  55                  60

Thr Glu Tyr Ser Gln Pro Pro Gly Phe Ser Gly Ser Ser Gln Thr Lys
 65                  70                  75                  80

Lys Gln Pro Trp Tyr Asn Ser Thr Leu Ala Ser Arg Arg Lys Arg Leu
               85                  90                  95

Thr Ala His Phe Glu Asp Leu Glu Gln Cys Tyr Phe Ser Thr Arg Met
          100                 105                 110

Ser Arg Ile Ser Asp Asp Ser Arg Thr Ala Ser Gln Leu Asp Glu Phe
          115                 120                 125

Gln Glu Cys Leu Ser Lys Phe Thr Arg Tyr Asn Ser Val Arg Pro Leu
     130                 135                 140

Ala Thr Leu Ser Tyr Ala Ser Asp Leu Tyr Asn Gly Ser Ser Ile Val
145                 150                 155                 160

Ser Ser Ile Glu Phe Asp Arg Asp Cys Asp Tyr Phe Ala Ile Ala Gly
               165                 170                 175

Val Thr Lys Lys Ile Lys Val Tyr Glu Tyr Asp Thr Val Ile Gln Asp
          180                 185                 190

Ala Val Asp Ile His Tyr Pro Glu Asn Glu Met Thr Cys Asn Ser Lys
          195                 200                 205

Ile Ser Cys Ile Ser Trp Ser Ser Tyr His Lys Asn Leu Leu Ala Ser
     210                 215                 220

Ser Asp Tyr Glu Gly Thr Val Ile Leu Trp Asp Gly Phe Thr Gly Gln
225                 230                 235                 240
```

```
Arg Ser Lys Val Tyr Gln Glu His Glu Lys Arg Cys Trp Ser Val Asp
                245                 250                 255

Phe Asn Leu Met Asp Pro Lys Leu Leu Ala Ser Gly Ser Asp Asp Ala
            260                 265                 270

Lys Val Lys Leu Trp Ser Thr Asn Leu Asp Asn Ser Val Ala Ser Ile
        275                 280                 285

Glu Ala Lys Ala Asn Val Cys Cys Val Lys Phe Ser Pro Ser Ser Arg
    290                 295                 300

Tyr His Leu Ala Phe Gly Cys Ala Asp His Cys Val His Tyr Tyr Asp
305                 310                 315                 320

Leu Arg Asn Thr Lys Gln Pro Ile Met Val Phe Lys Gly His Arg Lys
                325                 330                 335

Ala Val Ser Tyr Ala Lys Phe Val Ser Gly Glu Glu Ile Val Ser Ala
            340                 345                 350

Ser Thr Asp Ser Gln Leu Lys Leu Trp Asn Val Gly Lys Pro Tyr Cys
            355                 360                 365

Leu Arg Ser Phe Lys Gly His Ile Asn Glu Lys Asn Phe Val Gly Leu
        370                 375                 380

Ala Ser Asn Gly Asp Tyr Ile Ala Cys Gly Ser Glu Asn Asn Ser Leu
385                 390                 395                 400

Tyr Leu Tyr Tyr Lys Gly Leu Ser Lys Thr Leu Leu Thr Phe Lys Phe
                405                 410                 415

Asp Thr Val Lys Ser Val Leu Asp Lys Asp Arg Lys Glu Asp Asp Thr
            420                 425                 430

Asn Glu Phe Val Ser Ala Val Cys Trp Arg Ala Leu Pro Asp Gly Glu
            435                 440                 445

Ser Asn Val Leu Ile Ala Ala Asn Ser Gln Gly Thr Ile Lys Val Leu
    450                 455                 460

Glu Leu Val Xaa
465


<210> 388
<211> 29
<212> PRT
<213> Homo sapiens

<400> 388
Met Arg Lys Glu Asp Gly Phe Trp Phe Phe Phe Phe Leu Phe Phe Phe
  1               5                  10                  15

Val Val Gly Ser Lys Phe Val Asn Gly Asn Lys Leu Val
            20                  25
```

```
<210> 389
<211> 29
<212> PRT
<213> Homo sapiens

<400> 389
Met Pro Leu Ala Pro Tyr Cys Asp Leu Leu Val Ala Leu Ser Phe Ala
 1               5                   10                  15

Leu Val Leu Glu Ser Pro Val Asp Ser Ser Asp Phe Thr
            20                  25


<210> 390
<211> 138
<212> PRT
<213> Homo sapiens

<400> 390
Met Asn Ser Leu Val Ser Trp Gln Leu Leu Leu Phe Leu Cys Ala Thr
 1               5                   10                  15

His Phe Gly Glu Pro Leu Glu Lys Val Ala Ser Val Gly Asn Ser Arg
            20                  25                  30

Pro Thr Gly Gln Gln Leu Glu Ser Leu Gly Leu Leu Ala Pro Gly Glu
        35                  40                  45

Gln Ser Leu Pro Cys Thr Glu Arg Lys Pro Ala Ala Thr Ala Arg Leu
    50                  55                  60

Ser Arg Arg Gly Thr Ser Leu Ser Pro Pro Glu Ser Ser Gly Ser
 65                 70                  75                  80

Pro Gln Gln Pro Gly Leu Ser Ala Pro His Ser Arg Gln Ile Pro Ala
                85                  90                  95

Pro Gln Gly Ala Val Leu Val Gln Arg Glu Lys Asp Leu Pro Asn Tyr
                100                 105                 110

Asn Trp Asn Ser Phe Gly Leu Arg Phe Gly Lys Arg Glu Ala Ala Pro
            115                 120                 125

Gly Asn His Gly Arg Ser Ala Gly Arg Gly
    130                 135


<210> 391
<211> 74
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
```

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<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 391
Met Ser Cys Phe Ile Asp Ser Xaa Asp Ser Lys Ile Leu His Leu Leu
 1               5                  10                  15

Val Val Ser Phe Ile Cys Xaa Leu Phe Leu Leu Ile Leu Thr His Gly
            20                  25                  30

Ile Leu Ile Leu Arg Xaa Phe Phe Ser Val Xaa Xaa His Ser Leu Lys
        35                  40                  45

Asn Asn Leu Glu Glu Tyr Leu Ile Leu Met Asn Lys Ala Leu Leu Thr
    50                  55                  60

Arg Glu Asp Phe Phe Val Leu Pro Xaa Ala
 65                  70


<210> 392
<211> 521
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (521)
<223> Xaa equals stop translation

<400> 392
Met Ser Ala Gly Glu Val Glu Arg Leu Val Ser Glu Leu Ser Gly Gly
 1               5                  10                  15

Thr Gly Gly Asp Glu Glu Glu Glu Trp Leu Tyr Gly Asp Glu Asn Glu
```

```
              20                    25                    30
Val Glu Arg Pro Glu Glu Glu Asn Ala Ser Ala Asn Pro Pro Ser Gly
         35                    40                    45

Ile Glu Asp Glu Thr Ala Glu Asn Gly Val Pro Lys Pro Lys Val Thr
    50                    55                    60

Glu Thr Glu Asp Asp Ser Asp Ser Asp Ser Asp Asp Asp Glu Asp Asp
65                    70                    75                    80

Val His Val Thr Ile Gly Asp Ile Lys Thr Gly Ala Pro Gln Tyr Gly
                  85                    90                    95

Ser Tyr Gly Thr Ala Pro Val Asn Leu Asn Ile Lys Thr Gly Gly Arg
             100                   105                   110

Val Tyr Gly Thr Thr Gly Thr Lys Val Lys Gly Val Asp Leu Asp Ala
         115                   120                   125

Pro Gly Ser Ile Asn Gly Val Pro Leu Leu Glu Val Asp Leu Asp Ser
    130                   135                   140

Phe Glu Asp Lys Pro Trp Arg Lys Pro Gly Ala Asp Leu Ser Asp Tyr
145                   150                   155                   160

Phe Asn Tyr Gly Phe Asn Glu Asp Thr Trp Lys Ala Tyr Cys Glu Lys
                  165                   170                   175

Gln Lys Arg Ile Arg Met Gly Leu Glu Val Ile Pro Val Thr Ser Thr
         180                   185                   190

Thr Asn Lys Ile Thr Val Gln Gln Gly Arg Thr Gly Asn Ser Glu Lys
         195                   200                   205

Glu Thr Ala Leu Pro Ser Thr Lys Ala Glu Phe Thr Ser Pro Pro Ser
    210                   215                   220

Leu Phe Lys Thr Gly Leu Pro Pro Ser Arg Leu Pro Gly Ala Ile
225                   230                   235                   240

Asp Val Ile Gly Gln Thr Ile Thr Ile Ser Arg Val Glu Gly Arg Arg
             245                   250                   255

Arg Ala Asn Glu Asn Ser Asn Ile Gln Val Leu Ser Glu Arg Ser Ala
         260                   265                   270

Thr Glu Val Asp Asn Asn Phe Ser Lys Pro Pro Pro Phe Phe Pro Pro
         275                   280                   285

Gly Ala Pro Pro Thr His Leu Pro Pro Pro Phe Leu Pro Pro Pro
    290                   295                   300

Pro Thr Val Ser Thr Ala Pro Pro Leu Ile Pro Pro Pro Gly Phe Pro
305                   310                   315                   320

Pro Pro Pro Gly Ala Pro Pro Pro Ser Leu Ile Pro Thr Ile Glu Ser
             325                   330                   335
```

```
Gly His Ser Ser Gly Tyr Asp Ser Arg Ser Ala Arg Ala Phe Pro Tyr
            340                 345                 350

Gly Asn Val Ala Phe Pro His Leu Pro Gly Ser Ala Pro Ser Trp Pro
            355                 360                 365

Ser Leu Val Asp Thr Ser Lys Gln Trp Asp Tyr Tyr Ala Arg Arg Glu
        370                 375                 380

Lys Asp Arg Asp Arg Glu Arg Asp Arg Asp Arg Glu Arg Asp Arg Asp
385                 390                 395                 400

Arg Asp Arg Glu Arg Glu Arg Thr Arg Glu Arg Glu Arg Glu Arg Asp
                405                 410                 415

His Ser Pro Thr Pro Ser Val Phe Asn Ser Asp Glu Glu Arg Tyr Arg
            420                 425                 430

Tyr Arg Glu Tyr Ala Glu Arg Gly Tyr Glu Arg His Arg Ala Ser Arg
            435                 440                 445

Glu Lys Glu Glu Arg His Arg Glu Arg Arg His Arg Glu Lys Glu Glu
        450                 455                 460

Thr Arg His Lys Ser Ser Arg Ser Asn Ser Arg Arg His Glu Ser
465                 470                 475                 480

Glu Glu Gly Asp Ser His Arg Arg His Lys His Lys Lys Ser Lys Arg
                485                 490                 495

Ser Lys Glu Gly Lys Glu Ala Gly Ser Glu Pro Ala Pro Glu Gln Glu
            500                 505                 510

Ser Thr Glu Ala Thr Pro Ala Glu Xaa
        515                 520


<210> 393
<211> 137
<212> PRT
<213> Homo sapiens

<400> 393
Met Asn Ser Arg Gly Ile Trp Leu Ala Tyr Ile Ile Leu Val Gly Leu
1               5                   10                  15

Leu His Met Val Leu Leu Ser Ile Pro Phe Phe Ser Ile Pro Val Val
                20                  25                  30

Trp Thr Leu Thr Asn Val Ile His Asn Leu Ala Thr Tyr Val Phe Leu
            35                  40                  45

His Thr Val Lys Gly Thr Pro Phe Glu Thr Pro Asp Gln Gly Lys Ala
        50                  55                  60

Arg Leu Leu Thr His Trp Glu Gln Met Asp Tyr Gly Leu Gln Phe Thr
65                  70                  75                  80
```

```
Ser Ser Arg Lys Phe Leu Ser Ile Ser Pro Ile Val Leu Tyr Leu Leu
                85                  90                      95

Ala Ser Phe Tyr Thr Lys Tyr Asp Ala Ala His Phe Leu Ile Asn Thr
            100                 105                 110

Ala Ser Leu Leu Ser Val Leu Leu Pro Lys Leu Pro Gln Phe His Gly
        115                 120                 125

Val Arg Val Phe Gly Ile Asn Lys Tyr
    130                 135


<210> 394
<211> 186
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (186)
<223> Xaa equals stop translation

<400> 394
Met Ala Ala Gln Lys Asp Gln Gln Lys Asp Ala Glu Ala Glu Gly Leu
  1               5                  10                      15

Ser Gly Thr Thr Leu Leu Pro Lys Leu Ile Pro Ser Gly Ala Gly Arg
            20                  25                  30

Glu Trp Leu Glu Arg Arg Arg Ala Thr Ile Arg Pro Trp Ser Thr Phe
        35                  40                  45

Val Asp Gln Gln Arg Phe Ser Arg Pro Arg Asn Leu Gly Glu Leu Cys
    50                  55                  60

Gln Arg Leu Val Arg Asn Val Glu Tyr Tyr Gln Ser Asn Tyr Val Phe
65                  70                  75                      80

Val Phe Leu Gly Leu Ile Leu Tyr Cys Val Val Thr Ser Pro Met Leu
                85                  90                      95

Leu Val Ala Leu Ala Val Phe Phe Gly Ala Cys Tyr Ile Leu Tyr Leu
            100                 105                 110

Arg Thr Leu Glu Ser Lys Leu Val Leu Phe Gly Arg Glu Val Ser Pro
        115                 120                 125

Ala His Gln Tyr Ala Leu Ala Gly Gly Ile Ser Phe Pro Phe Phe Trp
    130                 135                 140

Leu Ala Gly Ala Gly Ser Ala Val Phe Trp Val Leu Gly Ala Thr Leu
145                 150                 155                     160

Val Val Ile Gly Ser His Ala Ala Phe His Gln Ile Glu Ala Val Asp
                165                 170                     175
```

Gly Glu Glu Leu Gln Met Glu Pro Val Xaa
            180   185

<210> 395
<211> 1
<212> PRT
<213> Homo sapiens

<400> 395
Met
 1

<210> 396
<211> 299
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (299)
<223> Xaa equals stop translation

<400> 396
Met Leu Ser Ile Phe Tyr Phe Ala Ile Pro Val Gly Ser Gly Leu Gly
 1   5   10   15

Tyr Ile Ala Gly Ser Lys Val Lys Asp Met Ala Gly Asp Trp His Trp
                20   25   30

Ala Leu Arg Val Thr Pro Gly Leu Gly Val Val Ala Val Leu Leu Leu
            35   40   45

Phe Leu Val Val Arg Glu Pro Pro Arg Gly Ala Val Glu Arg His Ser
    50   55   60

Asp Leu Pro Pro Leu Asn Pro Thr Ser Trp Trp Ala Asp Leu Arg Ala
65   70   75   80

Leu Ala Arg Asn Pro Ser Phe Val Leu Ser Ser Leu Gly Phe Thr Ala
                85   90   95

Val Ala Phe Val Thr Gly Ser Leu Ala Leu Trp Ala Pro Ala Phe Leu
            100   105   110

Leu Arg Ser Arg Val Val Leu Gly Glu Thr Pro Pro Cys Leu Pro Gly
            115   120   125

Asp Ser Cys Ser Ser Ser Asp Ser Leu Ile Phe Gly Leu Ile Thr Cys
        130   135   140

Leu Thr Gly Val Leu Gly Val Gly Leu Gly Val Glu Ile Ser Arg Arg
145   150   155   160

Leu Arg His Ser Asn Pro Arg Ala Asp Pro Leu Val Cys Ala Thr Gly
                165   170   175

Leu Leu Gly Ser Ala Pro Phe Leu Phe Leu Ser Leu Ala Cys Ala Arg
            180   185   190

Gly Ser Ile Val Ala Thr Tyr Ile Phe Ile Phe Ile Gly Glu Thr Leu
        195   200   205

Leu Ser Met Asn Trp Ala Ile Val Ala Asp Ile Leu Leu Tyr Val Val
    210   215   220

Ile Pro Thr Arg Arg Ser Thr Ala Glu Ala Phe Gln Ile Val Leu Ser
225   230   235   240

His Leu Leu Gly Asp Ala Gly Ser Pro Tyr Leu Ile Gly Leu Ile Ser
            245   250   255

Asp Arg Leu Arg Arg Asn Trp Pro Pro Ser Phe Leu Ser Glu Phe Arg
            260   265   270

Ala Leu Gln Phe Ser Leu Met Leu Cys Ala Phe Val Gly Ala Leu Gly
        275   280   285

Gly Ala Leu Pro Gly His Arg His Leu His Xaa
    290   295

<210> 397
<211> 49
<212> PRT
<213> Homo sapiens

<400> 397
Met Gly Pro Gln Gly Trp Val Arg Pro Leu Lys Thr Ala Pro Lys Leu
1   5   10   15

Gly Glu Ala Ile Arg Leu Ile Leu Phe Leu Asn Phe Val Lys Gln Cys
            20   25   30

Ile Ala Ser Val Asn Leu Cys Ile Leu Arg Leu Asn Ile Thr Pro Leu
        35   40   45

Leu

<210> 398
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
<223> Xaa equals stop translation

<400> 398
Met Tyr Val Asn Tyr Gly Thr Arg Asn Tyr Ser Thr Glu Gly Pro Ala
1   5   10   15

Ala Leu Leu Asp Gln Ala Lys Leu Ser Leu Leu Val Trp Val Leu Cys
            20   25   30

Phe Val Leu Leu Phe Val Cys Phe Cys Gly Leu Ser Tyr Val Val Ile
        35   40   45

Ala Gln Val Pro Val Gly Leu Leu Cys Ile Thr Glu Xaa
    50   55   60

<210> 399
<211> 79
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 399
Met Leu Trp Phe Ala Asn Phe Phe Thr Tyr Leu Phe Leu Ser Gln Ser
1   5   10   15

Val Ala Phe Val His Ile Ser His Ile Gly Val Arg Gln Val Asn Thr
            20   25   30

Asn Cys Tyr Phe Ser Arg Lys Ser Tyr Cys Tyr Gly Ile Leu Asn Pro
        35   40   45

Ile Asn Cys Ile Lys Gly Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
    50   55   60

Lys Lys Lys Lys Ile Pro Ala Gly Arg Xaa Leu Phe Pro Phe Gly
65   70   75

<210> 400
<211> 36
<212> PRT
<213> Homo sapiens

<400> 400
Met Pro Gly Ala Phe Ser Glu Thr Val Ile Asn Asp Leu Leu Ser Leu
1   5   10   15

Phe Leu Val Leu Pro Ala Glu Leu Ser Tyr Ser Thr Leu Ser Gly Val
            20   25   30

Tyr Arg Asn Ala
        35

<210> 401
<211> 180
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (177)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (180)
<223> Xaa equals stop translation

<400> 401
Met Ala Gln Ser Arg Asp Gly Gly Asn Pro Phe Ala Glu Pro Ser Glu
 1               5                  10                  15

Leu Asp Asn Pro Phe Gln Asp Pro Ala Val Ile Gln His Arg Pro Ser
                20                  25                  30

Arg Gln Tyr Ala Thr Leu Asp Val Tyr Asn Pro Phe Glu Thr Arg Glu
            35                  40                  45

Pro Pro Pro Ala Tyr Glu Pro Ala Pro Ala Pro Leu Pro Pro Pro
        50                  55                  60

Ser Ala Pro Ser Leu Gln Pro Ser Arg Lys Leu Ser Pro Thr Glu Pro
65                  70                  75                  80

Lys Asn Tyr Gly Ser Tyr Ser Thr Gln Ala Ser Ala Ala Ala Ala Thr
                85                  90                  95

Ala Glu Leu Leu Lys Lys Gln Glu Glu Leu Asn Arg Lys Ala Glu Glu
            100                 105                 110

Leu Asp Arg Arg Ser Glu Ser Cys Ser Met Leu Pro Trp Xaa Ala Gln
        115                 120                 125

Leu Leu Asp Arg Thr Ile Gly Pro Leu Tyr Leu Leu Phe Val Gln Phe
        130                 135                 140

Ser Pro Ala Phe Ser Arg Thr Ser Pro Trp Arg Ser Pro Lys Asn Phe
145                 150                 155                 160

Arg Arg Leu Tyr Pro Pro Cys Thr Thr Ser Gly Cys Ala Ala Arg Trp
                165                 170                 175

Xaa Phe Ser Xaa
            180


<210> 402
<211> 21
<212> PRT
<213> Homo sapiens
```

```
<400> 402
Met Pro Thr Pro Cys Thr Ser Leu Pro Ser Cys Cys Gln His Arg Ser
  1               5                  10                      15

Ile Thr Met Thr Leu
             20


<210> 403
<211> 60
<212> PRT
<213> Homo sapiens

<400> 403
Met Pro Leu Phe Ile Pro Leu Ile Phe Phe Leu Ser Leu Leu His Cys
  1               5                  10                      15

Gln Ser Lys His Pro Ile Gln Met Ser Leu Cys Met Cys Val Asn Ile
              20                  25                  30

Ser Leu Val Trp Ser Pro Val Arg Trp Ile Phe Gly Ser Lys Gly Leu
             35                  40                  45

Phe Ser Val His Leu Gln Ser Ser Gln Arg Pro Ser
     50                  55                  60


<210> 404
<211> 185
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 404
Met Ala Gly Pro Arg Pro Xaa Trp Arg Asp Gln Leu Leu Phe Met Ser
  1               5                  10                      15

Ile Ile Val Leu Val Ile Val Val Ile Cys Leu Met Leu Tyr Ala Leu
              20                  25                  30

Leu Trp Glu Ala Gly Asn Leu Thr Asp Leu Pro Asn Leu Arg Ile Gly
             35                  40                  45

Phe Tyr Asn Phe Cys Leu Trp Asn Glu Asp Thr Ser Thr Leu Gln Cys
     50                  55                  60

His Gln Phe Pro Glu Leu Glu Ala Leu Gly Val Pro Arg Val Gly Leu
 65                  70                  75                      80

Gly Leu Ala Arg Leu Gly Val Tyr Gly Ser Leu Val Leu Thr Leu Phe
                 85                  90                      95

Ala Pro Gln Pro Leu Leu Leu Ala Gln Cys Asn Ser Asp Glu Arg Ala
                100                 105                 110
```

```
Trp Arg Leu Ala Val Gly Phe Leu Ala Val Ser Ser Val Leu Leu Ala
         115                 120                 125

Gly Gly Leu Gly Leu Phe Leu Ser Tyr Val Trp Lys Trp Val Arg Leu
     130                 135                 140

Ser Leu Pro Gly Pro Gly Phe Leu Ala Leu Gly Ser Ala Gln Ala Leu
145                 150                 155                 160

Leu Ile Leu Leu Leu Ile Ala Met Ala Val Phe Pro Leu Arg Ala Glu
               165                 170                 175

Arg Ala Glu Ser Lys Leu Glu Ser Cys
               180                 185
```

<210> 405
<211> 480
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE
<222> (480)
<223> Xaa equals stop translation

<400> 405

```
Met Ser Asp Gly Phe Asp Arg Ala Pro Gly Ala Gly Arg Gly Arg Xaa
 1               5                   10                  15

Arg Gly Leu Gly Arg Gly Gly Gly Gly Pro Xaa Gly Gly Gly Phe Pro
            20                  25                  30

Xaa Gly Xaa Xaa Pro Ala Glu Arg Xaa Arg His Gln Pro Pro Gln Pro
        35                  40                  45

Lys Ala Pro Gly Phe Leu Gln Pro Xaa Pro Leu Arg Gln Pro Arg Thr
    50                  55                  60

Thr Pro Pro Pro Gly Ala Gln Cys Glu Val Pro Ala Ser Pro Gln Arg
 65                 70                  75                  80

Pro Ser Arg Pro Gly Ala Leu Pro Glu Gln Thr Arg Pro Leu Arg Ala
                85                  90                  95

Pro Pro Ser Ser Gln Asp Lys Ile Pro Gln Gln Asn Ser Glu Ser Ala
            100                 105                 110

Met Ala Lys Pro Gln Val Val Val Ala Pro Val Leu Met Ser Lys Leu
    115                 120                 125

Ser Val Asn Ala Pro Glu Phe Tyr Pro Ser Gly Tyr Ser Ser Ser Tyr
    130                 135                 140

Thr Glu Ser Tyr Glu Asp Gly Cys Glu Asp Tyr Pro Thr Leu Ser Glu
145                 150                 155                 160

Tyr Val Gln Asp Phe Leu Asn His Leu Thr Glu Gln Pro Gly Ser Phe
                165                 170                 175

Glu Thr Glu Ile Glu Gln Phe Ala Gln Thr Leu Asn Gly Cys Val Thr
            180                 185                 190

Thr Asp Asp Ala Leu Gln Glu Leu Val Glu Leu Ile Tyr Gln Gln Ala
    195                 200                 205

Thr Ser Ile Pro Asn Phe Ser Tyr Met Gly Ala Arg Leu Cys Asn Tyr
    210                 215                 220

Leu Ser His His Leu Thr Ile Ser Pro Gln Ser Gly Asn Phe Arg Gln
225                 230                 235                 240

Leu Leu Leu Gln Arg Cys Arg Thr Glu Tyr Glu Val Lys Asp Gln Ala
                245                 250                 255

Ala Lys Gly Asp Glu Val Thr Arg Lys Arg Phe His Ala Phe Val Leu
            260                 265                 270

Phe Leu Gly Glu Leu Tyr Leu Asn Leu Glu Ile Lys Gly Thr Asn Gly
        275                 280                 285
```

Gln Val Thr Arg Ala Asp Ile Leu Gln Val Gly Leu Arg Glu Leu Leu
    290   295   300

Asn Ala Leu Phe Ser Asn Pro Met Asp Asp Asn Leu Ile Cys Ala Val
305   310   315   320

Lys Leu Leu Lys Leu Thr Gly Ser Val Leu Glu Asp Ala Trp Lys Glu
          325   330   335

Lys Gly Lys Met Asp Met Glu Glu Ile Ile Gln Arg Ile Glu Asn Val
          340   345   350

Val Leu Asp Ala Asn Cys Ser Arg Asp Val Lys Gln Met Leu Leu Lys
          355   360

Leu Val Glu Leu Arg Ser Ser Asn Trp Gly Arg Val His Ala Thr Ser
    370   375   380

Thr Tyr Arg Glu Ala Thr Pro Glu Asn Asp Pro Asn Tyr Phe Met Asn
385   390   395   400

Glu Pro Thr Phe Tyr Thr Ser Asp Gly Val Pro Phe Thr Ala Ala Asp
          405   410   415

Pro Asp Tyr Gln Glu Lys Tyr Gln Glu Leu Leu Glu Arg Glu Asp Phe
          420   425   430

Phe Pro Asp Tyr Glu Glu Asn Gly Thr Asp Leu Ser Gly Ala Gly Asp
          435   440   445

Pro Tyr Leu Asp Asp Ile Asp Asp Glu Met Asp Pro Glu Ile Glu Glu
    450   455   460

Ala Tyr Glu Lys Phe Cys Leu Glu Ser Glu Arg Lys Arg Lys Gln Xaa
465   470   475   480

<210> 406
<211> 193
<212> PRT
<213> Homo sapiens

<400> 406
Met Lys Thr Leu Ile Val Ala Val Leu Leu Ala Gly Val Val Pro Leu
  1   5   10   15

Leu Leu Gly Leu Leu Phe Glu Leu Val Ile Val Ala Pro Leu Arg Val
          20   25   30

Pro Leu Asp Gln Thr Pro Leu Phe Tyr Pro Trp Gln Asp Trp Ala Leu
        35   40   45

Gly Val Leu His Ala Lys Ile Ile Ala Ala Ile Thr Leu Met Gly Pro
    50   55   60

```
Gln Trp Trp Leu Lys Thr Val Ile Glu Gln Val Tyr Ala Asn Gly Ile
 65                  70                  75                      80

Arg Asn Ile Asp Leu His Tyr Ile Val Arg Lys Leu Ala Ala Pro Val
                 85                  90                  95

Ile Ser Val Leu Leu Leu Ser Leu Cys Val Pro Tyr Val Ile Ala Ser
            100                 105                 110

Gly Val Val Pro Leu Leu Gly Val Thr Ala Glu Met Gln Asn Leu Val
            115                 120                 125

His Arg Arg Ile Tyr Pro Phe Leu Leu Met Val Val Val Leu Met Ala
    130                 135                 140

Ile Leu Ser Phe Gln Val Arg Gln Phe Lys Arg Leu Tyr Glu His Ile
145                 150                 155                     160

Lys Asn Asp Lys Tyr Leu Val Gly Gln Arg Leu Val Asn Tyr Glu Arg
            165                 170                 175

Lys Ser Gly Lys Gln Gly Ser Ser Pro Pro Pro Gln Ser Ser Gln
            180                 185                 190

Glu
```

```
<210> 407
<211> 78
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (78)
<223> Xaa equals stop translation

<400> 407
Met Leu Arg Leu Asp Ile Ile Asn Ser Leu Val Thr Thr Val Phe Met
  1               5                  10                  15

Leu Ile Val Ser Val Leu Ala Leu Ile Pro Glu Thr Thr Thr Leu Thr
                20                  25                  30

Val Gly Gly Gly Val Phe Ala Leu Val Thr Ala Val Cys Cys Leu Ala
            35                  40                  45

Asp Gly Ala Leu Ile Tyr Arg Lys Leu Leu Phe Asn Pro Ser Gly Pro
        50                  55                  60

Tyr Gln Lys Lys Pro Val His Glu Lys Lys Glu Val Leu Xaa
 65                  70                  75

<210> 408
<211> 74
```

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (74)
<223> Xaa equals stop translation

<400> 408
Met Leu Lys Gln Val Met Phe Val Phe Ser Gly Met Gly Pro Arg Ser
1   5   10   15

His Cys Trp Gly Leu Pro Leu His Val Ala Pro Leu Cys Arg Gly His
            20   25   30

Gln Ala Asp Ser Ser His Leu Leu Pro Leu Lys His Gln Gly Ala Trp
        35   40   45

Asn Arg Asn Leu Ala Asn Gln Arg His Phe Phe Cys Pro Ser Ile Phe
    50   55   60

His Thr Cys Pro Thr Val Leu Phe Phe Xaa
65   70

<210> 409
<211> 20
<212> PRT
<213> Homo sapiens

<400> 409
Ala Arg Thr Ile Leu Val Leu Tyr Leu Ser Leu Gln Arg Leu Glu Asn
1   5   10   15

Leu Ala Tyr His
            20

<210> 410
<211> 87
<212> PRT
<213> Homo sapiens

<400> 410
Met Pro Leu Pro Ser Val Pro Ile Leu Gly Ile Phe Ser Phe Leu Ile
1   5   10   15

Pro Ser Ser Gln Gly Val Ser Tyr Thr Lys Leu Pro Ile Ser Ser Pro
            20   25   30

Gln Tyr Ser Pro Phe Val Asn Asp His Phe Ser Phe Leu Asn Pro Phe
        35   40   45

Pro Val Gln Ile His Thr Gly Phe Ala Arg Val Gly Ser Tyr Met Gln
    50   55   60

Met Pro Leu Val His Leu Cys Leu Leu Gln Thr Ser Leu Met Lys Asn
65   70   75   80

```
Ser Gly Val Gln Gln Gly Ser
                85


<210> 411
<211> 92
<212> PRT
<213> Homo sapiens

<400> 411
Met Asn Ala Ala Met Val His Ile Asn Arg Ala Leu Lys Leu Ile Ile
  1               5                  10                  15

Arg Leu Phe Leu Val Glu Asp Leu Val Asp Ser Leu Lys Leu Ala Val
               20                  25                  30

Phe Met Trp Leu Met Thr Tyr Val Gly Ala Val Phe Asn Gly Ile Thr
           35                  40                  45

Leu Leu Ile Leu Ala Glu Leu Leu Ile Phe Ser Val Pro Ile Val Tyr
     50                  55                  60

Glu Lys Tyr Lys Thr Gln Ile Asp His Tyr Val Gly Ile Ala Arg Asp
 65                  70                  75                  80

Gln Thr Lys Ser Ile Val Glu Lys Ile Pro Ser Lys
                85                  90


<210> 412
<211> 21
<212> PRT
<213> Homo sapiens

<400> 412
Met Ala Cys Ser Cys Leu Met Ile Gln Ser Phe Ser Thr Ser Ala Leu
  1               5                  10                  15

Val Leu Phe Tyr Gly
                20


<210> 413
<211> 174
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (174)
<223> Xaa equals stop translation
```

```
<400> 413
Met Glu Glu Gly Gly Asn Leu Gly Gly Leu Ile Lys Met Val His Leu
 1               5                   10                  15

Leu Val Leu Ser Gly Ala Trp Gly Met Gln Met Trp Val Thr Phe Val
                20                  25                  30

Ser Gly Phe Pro Ala Phe Pro Lys Pro Ser Pro Thr Tyr Leu Arg Thr
            35                  40                  45

Ser Ala Glu Gln Thr Leu Pro Leu Leu Leu Pro His Leu His Gly Leu
    50                  55                  60

Cys Leu His Gln Pro Leu His Leu Gly Phe Thr Ala Cys Leu Gly Ser
 65             70                  75                      80

Ala His Ile Leu Gly Gly Gln Pro Ala Leu Pro Ala Val Pro Glu Pro
                85                  90                  95

Tyr Ala Gly His Cys Gln Arg Pro Leu Ala Gly Thr Pro His His Ser
            100                 105                 110

Cys His Val Gly Pro Ala Asn Arg Gly Arg Arg Ser Glu Leu Trp Val
        115                 120                 125

Gly Arg Tyr Gln Ala Ala Asn Arg Phe Pro Ile Leu Asn Ala Xaa Cys
    130                 135                 140

Glu Arg Arg Thr Pro Ser Thr Val Leu Ser Ala Arg Ile Ser Ser Ala
145                 150                 155                 160

Thr Met Gly Cys Pro Leu Phe Ala Ile Trp Ala Ala Ser Xaa
                165                 170


<210> 414
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals stop translation

<400> 414
Met Ala Phe Ile Leu Leu Phe Tyr Cys Leu Met Thr Phe Leu Ser Leu
 1               5                   10                  15

Glu Gln Asn Ser Ala Thr Val Glu Pro Ser Ser His Glu Ile Leu His
                20                  25                  30

Leu Leu Gln Asn Cys Phe Glu Leu Leu Arg Thr Ser Thr Ser Gln Cys
            35                  40                  45

Thr Glu Gly Ile Pro Cys Gln Arg Tyr Gln Asn Gly Leu His Ile Xaa
    50                  55                  60
```

```
<210> 415
<211> 280
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (280)
<223> Xaa equals stop translation

<400> 415
Met Glu Ala Val Val Asn Leu Tyr Gln Glu Val Met Lys His Ala Asp
 1               5                  10                  15

Pro Arg Ile Gln Gly Tyr Pro Leu Met Gly Ser Pro Leu Leu Met Thr
            20                  25                  30

Ser Ile Leu Leu Thr Tyr Val Tyr Phe Val Leu Ser Leu Gly Pro Arg
            35                  40                  45

Ile Met Ala Asn Arg Lys Pro Phe Gln Leu Arg Gly Phe Met Ile Val
        50                  55                  60

Tyr Asn Phe Ser Leu Val Ala Leu Ser Leu Tyr Ile Val Tyr Glu Phe
 65                  70                  75                  80

Leu Met Ser Gly Trp Leu Ser Thr Tyr Thr Trp Arg Cys Asp Pro Val
                85                  90                  95

Asp Tyr Ser Asn Ser Pro Glu Ala Leu Arg Met Val Arg Val Ala Trp
            100                 105                 110

Leu Phe Leu Phe Ser Lys Phe Ile Glu Leu Met Asp Thr Val Ile Phe
            115                 120                 125

Ile Leu Arg Lys Lys Asp Gly Gln Val Thr Phe Leu His Val Phe His
        130                 135                 140

His Ser Val Leu Pro Trp Ser Trp Trp Gly Val Lys Ile Ala Pro
145                 150                 155                 160

Gly Gly Met Gly Ser Phe His Ala Met Ile Asn Ser Ser Val His Val
                165                 170                 175

Ile Met Tyr Leu Tyr Tyr Gly Leu Ser Ala Phe Gly Pro Val Ala Gln
            180                 185                 190

Pro Tyr Leu Trp Trp Lys Lys His Met Thr Ala Ile Gln Leu Ile Gln
        195                 200                 205

Phe Val Leu Val Ser Leu His Ile Ser Gln Tyr Tyr Phe Met Ser Ser
    210                 215                 220

Cys Asn Tyr Gln Tyr Pro Val Ile Ile His Leu Ile Trp Met Tyr Gly
```

```
225                     230                     235                     240

Thr Ile Phe Phe Met Leu Phe Ser Asn Phe Trp Tyr His Ser Tyr Thr
                245                     250                     255

Lys Gly Lys Arg Leu Pro Arg Ala Leu Gln Gln Asn Gly Ala Pro Gly
            260                     265                     270

Ile Ala Lys Val Lys Ala Asn Xaa
            275                     280
```

<210> 416
<211> 284
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (284)
<223> Xaa equals stop translation

<400> 416

```
Met Xaa Leu Trp Pro Gln Thr Cys Ser Gly Lys Phe Asp Gly Thr Leu
 1               5                     10                      15

Ala Phe Ser Ile His Xaa Leu Ala Val Ile Leu Gly Asp Gln Leu Thr
            20                      25                      30

Ala Ala Asp Leu Val Pro Ile Phe Asn Gly Phe Leu Lys Asp Leu Asp
        35                      40                      45

Glu Val Arg Ile Gly Val Leu Lys His Leu His Asp Phe Leu Lys Leu
    50                      55                      60

Leu His Ile Asp Lys Arg Arg Glu Tyr Leu Tyr Gln Leu Gln Glu Phe
 65                 70                      75                      80

Leu Val Thr Asp Asn Ser Arg Asn Trp Arg Phe Arg Ala Glu Leu Ala
                85                      90                      95

Glu Gln Leu Ile Leu Leu Leu Glu Leu Tyr Ser Pro Arg Asp Val Tyr
            100                     105                     110

Asp Tyr Leu Arg Pro Ile Ala Leu Asn Leu Cys Ala Asp Lys Val Ser
        115                     120                     125

Ser Val Arg Trp Ile Ser Tyr Lys Leu Val Ser Glu Met Val Lys Lys
```

```
      130                    135                    140
Leu His Ala Ala Thr Pro Pro Thr Phe Gly Val Asp Leu Ile Asn Glu
145                    150                    155                    160

Leu Val Glu Asn Phe Gly Arg Cys Pro Lys Trp Ser Gly Arg Gln Ala
                  165                    170                    175

Phe Val Phe Val Cys Gln Thr Val Ile Glu Asp Asp Cys Leu Pro Met
                  180                    185                    190

Asp Gln Phe Ala Val His Leu Met Pro His Leu Leu Thr Leu Ala Asn
          195                    200                    205

Asp Arg Val Pro Asn Val Arg Val Leu Leu Ala Lys Thr Leu Arg Gln
      210                    215                    220

Thr Leu Leu Glu Lys Asp Tyr Phe Leu Ala Ser Ala Ser Cys His Gln
225                    230                    235                    240

Glu Ala Val Glu Gln Thr Ile Met Ala Leu Gln Met Asp Arg Asp Ser
                  245                    250                    255

Asp Val Lys Tyr Phe Ala Ser Ile His Pro Ala Ser Thr Lys Ile Ser
              260                    265                    270

Glu Asp Ala Met Ser Thr Ala Ser Ser Thr Tyr Xaa
          275                    280


<210> 417
<211> 187
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (144)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (145)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 417
Met Leu Phe Leu Phe Phe Val Ile Ile Phe Leu Phe Val Phe Leu Ile
  1                5                    10                    15

Leu Ile Ile Gln Phe Ser Lys Pro Leu Thr Asn Pro His Pro Pro Ala
              20                    25                    30

Gly Xaa Ser Asp Arg Arg Arg Arg Tyr Ser Ser Tyr Arg Ser His Asp
```

```
        35                    40                    45
His Tyr Gln Arg Gln Arg Val Leu Gln Lys Glu Arg Ala Ile Glu Glu
     50                    55                    60

Arg Arg Val Val Phe Ile Gly Lys Ile Pro Gly Arg Met Thr Arg Ser
 65                    70                    75                    80

Glu Leu Lys Gln Arg Phe Ser Val Phe Gly Glu Ile Glu Glu Cys Thr
                   85                    90                    95

Ile His Phe Arg Val Gln Gly Asp Asn Tyr Gly Phe Val Thr Tyr Arg
                  100                   105                   110

Tyr Ala Glu Glu Ala Phe Ala Ala Ile Glu Ser Gly His Lys Leu Arg
             115                   120                   125

Gln Ala Asp Glu Gln Pro Phe Asp Leu Cys Phe Gly Gly Arg Arg Xaa
     130                   135                   140

Xaa Cys Lys Arg Ser Tyr Ser Asp Leu Asp Ser Asn Arg Glu Asp Phe
145                   150                   155                   160

Asp Pro Ala Pro Val Lys Ser Lys Phe Asp Ser Leu Asp Phe Asp Thr
                  165                   170                   175

Leu Leu Lys Gln Ala Gln Lys Asn Leu Arg Arg
             180                   185
```

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<210> 418
<211> 237
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (197)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (198)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (200)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (202)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (204)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (205)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (207)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (208)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (211)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (213)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (214)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (215)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (217)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (218)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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```
<221> SITE
<222> (219)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (222)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (223)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (224)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (226)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (227)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (228)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (237)
<223> Xaa equals stop translation

<400> 418
Met Lys Leu Pro Gly Lys Phe Arg Arg Ala His Gln Gly Asn Leu Glu
  1               5                  10                  15

Ser Gln Leu Thr Ser Glu Ser Tyr Tyr Lys Glu Thr Leu Ser Val Pro
               20                  25                  30

Thr Val Glu Ile Ile Gln Glu Leu Lys Asp Ile Phe Ser Glu Gln
          35                  40                  45

His Leu Lys Ala Leu Lys Cys Leu Ser Leu Val Pro Ser Val Met Gly
       50                  55                  60

Gln Leu Lys Phe Asn Thr Ser Glu Glu His His Ala Asp Met Tyr Arg
```

```
       65                      70                      75                      80
·  Ser Asp Leu Pro Asn Pro Asp Thr Leu Ser Ala Glu Leu His Cys Trp
                       85                      90                      95

   Arg Ile Lys Trp Lys His Arg Gly Lys Asp Ile Glu Leu Pro Ser Thr
                  100                     105                     110

   Ile Tyr Glu Ala Leu His Leu Pro Asp Ile Lys Phe Phe Pro Asn Val
              115                     120                     125

   Tyr Ala Leu Leu Lys Val Leu Cys Ile Leu Pro Val Met Lys Val Glu
          130                     135                     140

   Asn Glu Arg Tyr Glu Asn Gly Arg Lys Arg Leu Lys Ala Tyr Leu Arg
   145                     150                     155                     160

   Asn Thr Leu Thr Asp Gln Arg Ser Ser Asn Leu Ala Leu Leu Asn Ile
                  165                     170                     175

   Asn Phe Asp Ile Lys His Asp Leu Asp Leu Met Val Asp Thr Tyr Ile
                  180                     185                     190

   Lys Leu Tyr Thr Xaa Xaa Ser Xaa Leu Xaa Thr Xaa Xaa Ser Xaa Xaa
              195                     200                     205

   Val Glu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa
          210                     215                     220

   Asp Xaa Xaa Xaa Arg Glu Lys Ala Val Arg Cys Met Xaa
   225                     230                     235


   <210> 419
   <211> 192
   <212> PRT
   <213> Homo sapiens

   <220>
   <221> SITE
   <222> (192)
   <223> Xaa equals stop translation

   <400> 419
   Met Lys Pro Met Ala Val Val Ala Ser Thr Val Leu Gly Leu Val Gln
   1               5                       10                      15

   Asn Met Arg Ala Phe Gly Gly Ile Leu Val Val Val Tyr Tyr Val Phe
                  20                      25                      30

   Ala Ile Ile Gly Ile Asn Leu Phe Arg Gly Val Ile Val Ala Leu Pro
          35                      40                      45

   Gly Asn Ser Ser Leu Ala Pro Ala Asn Gly Ser Ala Pro Cys Gly Ser
          50                      55                      60

   Phe Glu Gln Leu Glu Tyr Trp Ala Asn Asn Phe Asp Asp Phe Ala Ala
      65                      70                      75                      80
```

```
Ala Leu Val Thr Leu Trp Asn Leu Met Val Val Asn Asn Trp Gln Val
              85                  90                  95

Phe Leu Asp Ala Tyr Arg Arg Tyr Ser Gly Pro Trp Ser Lys Ile Tyr
            100                 105                 110

Phe Val Leu Trp Trp Leu Val Ser Ser Val Ile Trp Val Asn Leu Phe
        115                 120                 125

Leu Ala Leu Ile Leu Glu Asn Phe Leu His Lys Trp Asp Pro Arg Ser
    130                 135                 140

His Leu Gln Pro Leu Ala Gly Thr Pro Glu Ala Thr Tyr Gln Met Thr
145                 150                 155                 160

Val Glu Leu Leu Phe Arg Asp Ile Leu Glu Glu Pro Gly Glu Asp Glu
                165                 170                 175

Leu Thr Glu Arg Leu Ser Gln His Pro His Leu Trp Leu Cys Arg Xaa
            180                 185                 190



<210> 420
<211> 21
<212> PRT
<213> Homo sapiens

<400> 420
Asn Val Val Val Val Ala Phe Gly Leu Ile Leu Ile Ile Glu Ser Leu
  1               5                  10                  15

Gly Glu Gln Cys Pro
              20


<210> 421
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (51)
<223> Xaa equals stop translation

<400> 421
Met Asn Trp Gly Leu Ser Ile Trp Leu His Tyr Tyr Glu Lys Lys Lys
  1               5                  10                  15

Glu Gln Val Phe Leu Val Ile Leu Ala His Val Val Arg Arg Cys Ala
              20                  25                  30

Ser Asp Gly Ile Leu Gln Phe Glu Ser Ser Leu Leu Lys Met Arg Arg
            35                  40                  45
```

```
Ala Pro Xaa
     50


<210> 422
<211> 32
<212> PRT
<213> Homo sapiens

<400> 422
Met Leu Ile Ile Ser Leu Arg Pro Gln Phe Pro Ser Leu Ile Val Gln
 1               5                  10                  15

Leu Glu Cys Ser Val Leu Phe Leu Pro Ile Ser Leu Asn Leu Leu Leu
              20                  25                  30



<210> 423
<211> 163
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (163)
<223> Xaa equals stop translation

<400> 423
Met Val Lys Val Cys Asn Asp Ser Asp Arg Trp Ser Leu Ile Ser Leu
 1               5                  10                  15

Ser Asn Asn Ser Gly Lys Asn Val Glu Leu Lys Phe Val Asp Ser Leu
              20                  25                  30

Arg Arg Gln Phe Glu Phe Ser Val Asp Ser Phe Gln Ile Lys Leu Asp
           35                  40                  45

Ser Leu Leu Leu Phe Tyr Glu Cys Ser Glu Asn Pro Met Thr Glu Thr
     50                  55                  60

Phe His Pro Thr Ile Ile Gly Glu Ser Val Tyr Gly Asp Phe Gln Glu
 65                  70                  75                  80

Ala Phe Asp His Leu Cys Asn Lys Ile Ile Ala Thr Arg Asn Pro Glu
              85                  90                  95

Glu Ile Arg Gly Gly Gly Leu Leu Lys Tyr Cys Asn Leu Leu Val Arg
              100                 105                 110

Gly Phe Arg Pro Ala Ser Asp Glu Ile Lys Thr Leu Gln Arg Tyr Met
           115                 120                 125

Cys Ser Arg Phe Phe Ile Asp Phe Ser Asp Ile Gly Glu Gln Gln Arg
     130                 135                 140
```

```
Lys Leu Glu Ser Tyr Leu Gln Asn His Phe Val Gly Ile Gly Arg Pro
145                 150                 155                 160

Gln Val Xaa


<210> 424
<211> 174
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (174)
<223> Xaa equals stop translation

<400> 424
Met Ala Pro Lys Gly Lys Val Gly Thr Arg Gly Lys Lys Gln Ile Phe
1                   5                   10                  15

Glu Glu Asn Arg Glu Thr Leu Lys Phe Tyr Leu Arg Ile Ile Leu Gly
                20                  25                  30

Ala Asn Ala Ile Tyr Cys Leu Val Thr Leu Val Phe Phe Tyr Ser Ser
            35                  40                  45

Ala Ser Phe Trp Ala Trp Leu Ala Leu Gly Phe Ser Leu Ala Val Tyr
        50                  55                  60

Gly Ala Ser Tyr His Ser Met Ser Ser Met Arg Ala Ala Phe Ser
65                  70                  75                  80

Glu Asp Gly Ala Leu Met Asp Gly Gly Met Asp Leu Asn Met Glu Gln
                85                  90                  95

Gly Met Ala Glu His Leu Lys Asp Val Ile Leu Leu Thr Ala Ile Val
                100                 105                 110

Gln Val Leu Ser Cys Phe Ser Leu Tyr Val Trp Ser Phe Trp Leu Leu
        115                 120                 125

Ala Pro Gly Arg Ala Leu Tyr Leu Leu Trp Val Asn Val Leu Gly Pro
        130                 135                 140

Trp Phe Thr Ala Asp Ser Gly Thr Pro Ala Pro Glu His Asn Glu Lys
145                 150                 155                 160

Arg Gln Arg Arg Gln Glu Arg Arg Gln Met Lys Arg Leu Xaa
                165                 170


<210> 425
<211> 50
<212> PRT
<213> Homo sapiens
```

<220>
<221> SITE
<222> (50)
<223> Xaa equals stop translation

<400> 425
Met Glu Leu Pro Lys Gly Leu Gln Gly Val Gly Pro Val Ala Met Met
1   5   10   15

Arg Pro Phe Tyr Leu Leu Leu Pro Val Leu Cys Thr Gln Ala Leu Arg
            20   25   30

Gln Ser Gln Gly Lys Ser Pro Leu Leu Trp Lys Arg Thr Cys Cys Leu
        35   40   45

Ala Xaa
    50

<210> 426
<211> 120
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 426
Met Leu Gly Lys Gly Gly Gly Arg Ala Gly Leu Leu Arg Tyr Arg Leu
1   5   10   15

Leu Tyr Phe Thr Leu Val Val Gly Glu Gly Glu Pro Gly Glu Asn Lys
            20   25   30

Val Thr Ile Pro Phe Phe Glu Thr Lys Lys Ile Ile Phe Cys Ser
        35   40   45

Val Lys Met Val Glu Asn Ser Asn Val Pro Ser His Lys Gly Pro Val
    50   55   60

Pro Leu Arg Ser Glu Gln Trp Glu Leu Lys Ser Glu Thr Leu Gly
    65   70   75   80

Glu Gly Lys Ile Gly Phe Leu Leu Ile Gly Arg Cys Ser Ser Gly Xaa
                85   90   95

Gly Gly Leu Cys Phe Cys Trp Asp Val Leu Cys Cys Met Tyr Ala Tyr
            100   105   110

Met Asp Arg Ser Leu Leu Ser Leu
        115   120

<210> 427
<211> 159
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (159)
<223> Xaa equals stop translation

<400> 427
Met Thr His Leu Leu Leu Thr Ala Thr Val Thr Pro Ser Glu Gln Asn
 1   5   10   15

Ser Ser Arg Glu Pro Gly Trp Glu Thr Ala Met Ala Lys Asp Ile Leu
            20   25   30

Gly Glu Ala Gly Leu His Phe Asp Glu Leu Asn Lys Leu Arg Val Leu
            35   40   45

Asp Pro Glu Val Thr Gln Gln Thr Ile Glu Leu Lys Glu Glu Cys Lys
        50   55   60

Asp Phe Val Asp Lys Ile Gly Gln Phe Gln Lys Ile Val Gly Gly Leu
 65   70   75   80

Ile Glu Leu Val Asp Gln Leu Ala Lys Glu Ala Glu Asn Glu Lys Met
                85   90   95

Lys Ala Ile Gly Ala Arg Asn Leu Leu Lys Ser Ile Ala Lys Gln Arg
            100   105   110

Glu Ala Gln Gln Gln Gln Leu Gln Ala Leu Ile Ala Glu Lys Lys Met
            115   120   125

Gln Leu Glu Arg Tyr Arg Val Glu Tyr Glu Ala Leu Cys Lys Val Glu
        130   135   140

Ala Glu Gln Asn Glu Phe Ile Asp Gln Phe Ile Phe Gln Lys Xaa
145   150   155

<210> 428
<211> 154
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (154)
<223> Xaa equals stop translation

<400> 428
Met Asn Val Gly Val Ala His Ser Glu Val Asn Pro Asn Thr Arg Val
 1   5   10   15

Met Asn Ser Arg Gly Met Trp Leu Thr Tyr Ala Leu Gly Val Gly Leu
            20   25   30

Leu His Ile Val Leu Leu Ser Ile Pro Phe Phe Ser Val Pro Val Ala
            35   40   45

```
Trp Thr Leu Thr Asn Ile Ile His Asn Leu Gly Met Tyr Val Phe Leu
    50                      55                  60

His Ala Val Lys Gly Thr Pro Phe Glu Thr Pro Asp Gln Gly Lys Ala
 65                  70                  75                      80

Arg Leu Leu Thr His Trp Glu Gln Leu Asp Tyr Gly Val Gln Phe Thr
                85                  90                      95

Ser Ser Arg Lys Phe Phe Thr Ile Ser Pro Ile Ile Leu Tyr Phe Leu
             100                 105                 110

Ala Ser Phe Tyr Thr Lys Tyr Asp Pro Thr His Phe Ile Leu Asn Thr
         115                 120                 125

Ala Ser Leu Leu Ser Val Leu Ile Pro Lys Met Pro Gln Leu His Gly
     130                 135                 140

Val Arg Ile Phe Gly Ile Asn Lys Tyr Xaa
145                 150
```

<210> 429
<211> 204
<212> PRT
<213> Homo sapiens

<400> 429

```
Met Val Cys Gly Gly Phe Ala Cys Ser Lys Asn Cys Leu Cys Ala Leu
  1               5                  10                  15

Asn Leu Leu Tyr Thr Leu Val Ser Leu Leu Leu Ile Gly Ile Ala Ala
             20                  25                  30

Trp Gly Ile Gly Phe Gly Leu Ile Ser Ser Leu Arg Val Val Gly Val
         35                  40                  45

Val Ile Ala Val Gly Ile Phe Leu Phe Leu Ile Ala Leu Val Gly Leu
     50                  55                  60

Ile Gly Ala Val Lys His His Gln Val Leu Leu Phe Phe Tyr Met Ile
 65                  70                  75                      80

Ile Leu Leu Leu Val Phe Ile Val Gln Phe Ser Val Ser Cys Ala Cys
                 85                  90                      95

Leu Ala Leu Asn Gln Glu Gln Gln Gly Gln Leu Leu Glu Val Gly Trp
             100                 105                 110

Asn Asn Thr Ala Ser Ala Arg Asn Asp Ile Gln Arg Asn Leu Asn Cys
         115                 120                 125

Cys Gly Phe Arg Ser Val Asn Pro Asn Asp Thr Cys Leu Ala Ser Cys
     130                 135                 140

Val Lys Ser Asp His Ser Cys Ser Pro Cys Ala Pro Ile Ile Gly Glu
145                 150                 155                 160
```

```
Tyr Ala Gly Glu Val Leu Arg Phe Val Gly Gly Ile Gly Leu Phe Phe
                165                     170                 175

Ser Phe Thr Glu Ile Leu Gly Val Trp Leu Thr Tyr Arg Tyr Arg Asn
            180                     185                 190

Gln Lys Asp Pro Arg Ala Asn Pro Ser Ala Phe Leu
        195                     200
```

```
<210> 430
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals stop translation

<400> 430
Met Leu Gln Ser Ile Ile Lys Asn Ile Trp Ile Pro Met Lys Pro Tyr
 1               5                   10                  15

Tyr Thr Lys Val Tyr Gln Glu Ile Trp Ile Gly Met Gly Leu Met Gly
            20                  25                  30

Phe Ile Val Tyr Lys Ile Arg Ala Ala Asp Lys Arg Ser Lys Ala Leu
        35                  40                  45

Lys Ala Ser Ala Pro Ala Pro Gly His His Asn Gln Ile Tyr Leu Glu
    50                  55                  60

Tyr Met Xaa
 65
```

```
<210> 431
<211> 25
<212> PRT
<213> Homo sapiens

<400> 431
Met Leu Gly Val Ser Leu Phe Leu Leu Val Val Leu Tyr His Tyr Val
 1               5                   10                  15

Ala Val Asn Asn Pro Lys Lys Gln Glu
            20                  25
```

```
<210> 432
<211> 299
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (254)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (255)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (299)
<223> Xaa equals stop translation

<400> 432

```
Met Ala Ala Xaa Glu Pro Ala Val Leu Ala Leu Pro Asn Ser Gly Ala
1               5                   10                  15

Gly Gly Ala Gly Ala Pro Ser Gly Thr Val Pro Val Leu Phe Cys Phe
            20                  25                  30

Ser Val Phe Ala Arg Pro Ser Ser Val Pro His Gly Ala Gly Tyr Glu
            35                  40                  45

Leu Leu Ile Gln Lys Phe Leu Ser Leu Tyr Gly Asp Gln Ile Asp Met
    50                  55                  60

His Arg Lys Phe Val Val Gln Leu Phe Ala Glu Glu Trp Gly Gln Tyr
65                  70                  75                  80

Val Asp Leu Pro Lys Gly Phe Ala Val Ser Glu Arg Cys Lys Val Arg
                85                  90                  95

Leu Val Pro Leu Gln Ile Gln Leu Thr Thr Leu Gly Asn Leu Thr Pro
            100                 105                 110

Ser Ser Thr Val Phe Phe Cys Cys Asp Met Gln Glu Arg Phe Arg Pro
        115                 120                 125

Ala Ile Lys Tyr Phe Gly Asp Ile Ile Ser Val Gly Gln Arg Leu Leu
    130                 135                 140

Gln Gly Ala Arg Ile Leu Gly Ile Pro Val Ile Val Thr Glu Gln Tyr
145                 150                 155                 160

Pro Lys Gly Leu Gly Ser Thr Val Gln Glu Ile Asp Leu Thr Gly Val
                165                 170                 175

Lys Leu Val Leu Pro Lys Thr Lys Phe Ser Met Val Leu Pro Glu Val
            180                 185                 190

Glu Ala Ala Leu Ala Glu Ile Pro Gly Val Arg Ser Val Val Leu Phe
            195                 200                 205
```

```
Gly Val Glu Thr His Val Cys Ile Gln Gln Thr Ala Leu Glu Leu Val
    210                 215                 220

Gly Arg Gly Val Glu Val His Ile Val Ala Asp Ala Thr Ser Ser Arg
225                 230                 235                 240

Ser Met Met Asp Arg Met Phe Ala Leu Glu Arg Leu Ala Xaa Xaa Gly
                245                 250                 255

Ile Ile Val Thr Thr Ser Glu Ala Val Leu Leu Gln Leu Val Ala Asp
                260                 265                 270

Lys Asp His Pro Lys Phe Lys Glu Ile Gln Asn Leu Ile Lys Ala Ser
        275                 280                 285

Ala Pro Glu Ser Gly Leu Leu Ser Lys Val Xaa
    290                 295
```

```
<210> 433
<211> 86
<212> PRT
<213> Homo sapiens

<400> 433
Met Gln Ser Ser Tyr Ile Ile Ser Gly Cys Leu Phe Ser Ile Leu Phe
  1                 5                 10                 15

Pro Leu Phe Ile Ile Ser Ala Asn Glu Ala Lys Thr Pro Gly Lys Ala
                20                 25                 30

Tyr Leu Phe Gln Leu Arg Leu Phe Ser Leu Val Val Phe Leu Ser Asn
        35                 40                 45

Arg Leu Phe His Lys Thr Val Tyr Leu Gln Ser Ala Leu Ser Ser Ser
    50                 55                 60

Thr Ser Ala Glu Lys Phe Pro Ser Pro His Pro Ser Pro Ala Lys Leu
65                 70                 75                 80

Lys Ala Thr Ala Gly His
                85
```

```
<210> 434
<211> 198
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (193)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (196)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (198)
<223> Xaa equals stop translation

<400> 434
Met Phe Gly Cys Leu Val Ala Gly Arg Leu Val Gln Thr Ala Ala Gln
  1               5                  10                  15

Gln Val Ala Glu Asp Lys Phe Val Phe Asp Leu Pro Asp Tyr Glu Ser
                 20                  25                  30

Ile Asn His Val Val Val Phe Met Leu Gly Thr Ile Pro Phe Pro Glu
             35                  40                  45

Gly Met Gly Gly Ser Val Tyr Phe Ser Tyr Pro Asp Ser Asn Gly Met
         50                  55                  60

Pro Val Trp Gln Leu Leu Gly Phe Val Thr Asn Gly Lys Pro Ser Ala
 65                  70                  75                  80

Ile Phe Lys Ile Ser Gly Leu Lys Ser Gly Glu Gly Ser Gln His Pro
                 85                  90                  95

Phe Gly Ala Met Asn Ile Val Arg Thr Pro Ser Val Ala Gln Ile Gly
             100                 105                 110

Ile Ser Val Glu Leu Leu Asp Ser Met Ala Gln Gln Thr Pro Val Gly
         115                 120                 125

Asn Ala Val Ser Ser Val Asp Ser Phe Thr Gln Phe Thr Gln Lys
     130                 135                 140

Met Leu Asp Asn Phe Tyr Asn Phe Ala Ser Ser Phe Ala Val Ser Gln
145                 150                 155                 160

Ala Gln Met Thr Pro Ser Pro Ser Glu Met Phe Ile Pro Ala Asn Val
                 165                 170                 175

Val Leu Lys Trp Tyr Glu Asn Phe Gln Arg Arg Leu Ala Gln Asn Pro
             180                 185                 190

Xaa Phe Trp Xaa Thr Xaa
         195


<210> 435
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals stop translation

<400> 435
```

```
Met Gly Leu Pro Leu Met Ala Leu Met Trp Ser Thr Leu Pro Ala Ser
 1               5                  10                  15

Ala Gly Val Asn Phe Ile Leu Ala Leu Pro Leu Leu Leu Trp Lys
            20                  25                  30

Asn Arg Gly Gly Val Gly Arg Ser Val Met Ser Ala Val Glu Xaa
            35                  40                  45
```

```
<210> 436
<211> 370
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (370)
<223> Xaa equals stop translation

<400> 436
Met Lys Lys Val Glu Glu Lys Arg Val Asp Val Asn Ser Ala Val Ala
 1               5                  10                  15

Met Gly Glu Val Ile Leu Ala Val Cys His Pro Asp Cys Ile Thr Thr
            20                  25                  30

Ile Lys His Trp Ile Thr Ile Ile Arg Ala Arg Phe Glu Glu Val Leu
            35                  40                  45

Thr Trp Ala Lys Gln His Gln Gln Arg Leu Glu Thr Ala Leu Ser Glu
    50                  55                  60

Leu Val Ala Asn Ala Glu Leu Leu Glu Glu Leu Ala Trp Ile Gln
 65                  70                  75                  80

Trp Ala Glu Thr Thr Leu Ile Gln Arg Asp Gln Glu Pro Ile Pro Gln
                85                  90                  95

Asn Ile Asp Arg Val Lys Ala Leu Ile Ala Glu His Gln Thr Phe Met
            100                 105                 110

Glu Glu Met Thr Arg Lys Gln Pro Asp Val Asp Arg Val Thr Lys Thr
            115                 120                 125

Tyr Lys Arg Lys Asn Ile Glu Pro Thr His Ala Pro Phe Ile Glu Lys
    130                 135                 140

Ser Arg Ser Gly Gly Arg Lys Ser Leu Ser Gln Pro Thr Pro Pro
145                 150                 155                 160

Met Pro Ile Leu Ser Gln Ser Glu Ala Lys Asn Pro Arg Ile Asn Gln
            165                 170                 175

Leu Ser Ala Arg Trp Gln Gln Val Trp Leu Leu Ala Leu Glu Arg Gln
            180                 185                 190

Arg Lys Leu Asn Asp Ala Leu Asp Arg Leu Glu Glu Leu Lys Glu Phe
```

```
            195                   200                   205
Ala Asn Phe Asp Phe Asp Val Trp Arg Lys Lys Tyr Met Arg Trp Met
    210                   215                   220

Asn His Lys Lys Ser Arg Val Met Asp Phe Phe Arg Arg Ile Asp Lys
225                   230                   235                   240

Asp Gln Asp Gly Lys Ile Thr Arg Gln Glu Phe Ile Asp Gly Ile Leu
                245                   250                   255

Ala Ser Lys Phe Pro Thr Thr Lys Leu Glu Met Thr Ala Val Ala Asp
            260                   265                   270

Ile Phe Asp Arg Asp Gly Asp Gly Tyr Ile Asp Tyr Tyr Glu Phe Val
        275                   280                   285

Ala Ala Leu His Pro Asn Lys Asp Ala Tyr Arg Pro Thr Thr Asp Ala
    290                   295                   300

Asp Lys Ile Glu Asp Glu Val Thr Arg Gln Ala Gln Cys Lys Cys
305                   310                   315                   320

Ala Lys Arg Phe Gln Val Glu Gln Ile Gly Glu Asn Lys Tyr Arg Phe
                325                   330                   335

Phe Leu Gly Asn Gln Phe Gly Asp Ser Gln Gln Leu Arg Leu Val Arg
            340                   345                   350

Ile Leu Arg Asn Arg Asp Gly Ser Arg Trp Trp Arg Met Asp Gly Leu
        355                   360                   365

Gly Xaa
    370


<210> 437
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 437
Met Asn Val Lys Thr Phe Ser Xaa Asp His Met His Phe Leu Cys Cys
  1               5                  10                  15

Leu Tyr Leu Arg Tyr Val Thr Phe Val Tyr Leu Asn Leu Phe
            20                  25                  30


<210> 438
<211> 24
<212> PRT
<213> Homo sapiens
```

```
<400> 438
Met Glu Pro His Leu Arg Cys Arg Val Thr Arg Val Arg Gly Ser Leu
  1               5                   10                  15

Gly Asn Thr Gly Arg Trp Leu Leu
              20


<210> 439
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 439
Met His Tyr Leu Val Leu Gly Gly Leu Gly Val Phe Leu Phe Phe Ser
  1               5                   10                  15

Cys Phe Val Phe Leu Phe Phe Xaa Phe Ser Phe Ala Phe Phe Pro Phe
              20                  25                  30

Tyr Leu Glu Gly Met Gly Gly Ser Gly Asn Arg Glu Val Gly Gly Gly
          35                  40                  45

Phe Cys Leu Phe Phe
      50


<210> 440
<211> 176
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (176)
<223> Xaa equals stop translation

<400> 440
Met Val Ser Lys Ala Leu Leu Arg Leu Val Ser Ala Val Asn Arg Arg
  1               5                   10                  15

Arg Met Lys Leu Leu Leu Gly Ile Ala Leu Leu Ala Tyr Val Ala Ser
              20                  25                  30

Val Trp Gly Asn Phe Val Asn Met Arg Ser Ile Gln Glu Asn Gly Glu
          35                  40                  45

Leu Lys Ile Glu Ser Lys Ile Glu Glu Met Val Glu Pro Leu Arg Glu
      50                  55                  60

Lys Ile Arg Asp Leu Glu Lys Ser Phe Thr Gln Lys Tyr Pro Pro Val
  65                  70                  75                  80
```

```
Lys Phe Leu Ser Glu Lys Asp Arg Lys Arg Ile Leu Ile Thr Gly Gly
              85                  90                      95

Ala Gly Phe Val Gly Ser His Leu Thr Asp Lys Leu Met Met Asp Gly
             100             105             110

His Glu Val Thr Val Val Asp Asn Phe Phe Thr Gly Arg Lys Arg Asn
         115                 120             125

Val Glu His Trp Ile Gly His Glu Asn Phe Glu Leu Ile Asn His Asp
    130                 135             140

Val Trp Ser Pro Ser Thr Ser Arg Leu Thr Arg Tyr Thr Ile Trp His
145                 150             155                 160

Leu Gln Pro Pro Leu Gln Thr Thr Cys Ile Ile Leu Ser Arg His Xaa
                165             170             175
```

```
<210> 441
<211> 77
<212> PRT
<213> Homo sapiens

<400> 441
Met Leu Arg Cys Trp Pro Leu Phe Trp Leu Pro Leu Val Ser Pro Phe
 1               5               10                  15

Cys Ser Leu Phe Trp Leu Leu Val Glu Trp Phe Gly Thr Asn Ile Asp
            20              25              30

Arg Glu Ser Tyr Asp Ala Ile Gly Gly Pro Ser Trp Met Thr Ala Ser
        35              40              45

Ser Phe Cys Leu Ser Asn Ser Asn Ile Trp Ser Leu Glu Ile Ser Ser
    50              55              60

Gly Ser Thr Ser Val Val His Ser Gln Gln Ala Met Asp
65                  70              75
```

```
<210> 442
<211> 32
<212> PRT
<213> Homo sapiens

<400> 442
Met Arg Ser Cys Glu Ile Gln Leu Cys Val Trp Leu Leu Val Ser Ser
 1               5               10                  15

His Val Asp Met Val Leu Gly Gly Ser Pro Ser Thr Leu Tyr Met Met
            20              25              30
```

```
<210> 443
<211> 30
<212> PRT
<213> Homo sapiens

<400> 443
Met Val Val Asn Ser Leu Cys Phe Leu Ser Leu Leu Leu Val Ile Leu
1               5                   10                  15

Glu Leu Ser Thr Asp Ser Ser Ala Arg Leu Leu Tyr His Glu
            20                  25                  30


<210> 444
<211> 69
<212> PRT
<213> Homo sapiens

<400> 444
Met Asp Lys Gln Lys His Leu Glu Val Arg Arg Ser Val Phe Lys Ile
1               5                   10                  15

Gln Gly Lys Ile Ala Phe Ser Leu Met Phe Val Leu Lys Asp Leu Ser
            20                  25                  30

Pro Thr Ile Phe Ser His Ser Ile Leu Leu Leu Leu Pro His His Val
        35                  40                  45

Leu Pro Cys Thr Pro Gln Met Val Arg Gly Val Thr Gln Val Leu Arg
    50                  55                  60

Glu Phe Gly Asp Gln
65


<210> 445
<211> 63
<212> PRT
<213> Homo sapiens

<400> 445
Met Val Thr Gly Val Asn Pro Pro Leu Pro Pro Gln Leu Gln His Pro
1               5                   10                  15

Arg Pro Ile Asn Gln Leu Gly Ser Gly Ser Phe Phe Phe Ser Ser Phe
            20                  25                  30

Val Met Leu Arg Phe Lys Met Cys Val Leu His Cys Tyr Arg Leu Leu
        35                  40                  45

Phe Cys Leu Ile Lys Asp Phe Ser Pro Thr Phe Val Trp Thr His
    50                  55                  60


<210> 446
```

<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals stop translation

<400> 446
Met Lys Phe Ser Leu Val Leu Leu Ile Lys Ile Ile Ser Phe Glu Arg
 1   5   10   15

Leu Leu Ile Phe Leu Phe Pro Leu Ser Phe Leu Pro Asn Ile Trp Arg
            20   25   30

Arg Val Met Val Asn Leu Asn Ile Leu Phe Xaa
        35   40

<210> 447
<211> 33
<212> PRT
<213> Homo sapiens

<400> 447
Met Leu Leu Phe Pro Ser Leu Leu Phe Ala Ala Thr Tyr Asn Val Ala
 1   5   10   15

Asn Pro Ser Arg Leu Ile Leu Tyr Met Ile Ser Ala Gly Ala Asp Ser
            20   25   30

Gln

<210> 448
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 448
Met Trp Gln Val Arg Gly Leu Pro Pro Val Pro Leu Leu Leu Thr Met
 1   5   10   15

Ser Pro Pro Pro Cys Leu Ser Ser Pro Phe Pro Phe Ile Ser Val Pro
            20   25   30

Leu Phe Glu Ala Val Pro Ile Ser Val Ser Asp Gln Pro Ser Pro Xaa
            35   40   45

Leu Thr Thr Leu Leu
        50

```
<210> 449
<211> 64
<212> PRT
<213> Homo sapiens

<400> 449
Met Ile Thr Ser Val Leu Val Phe Leu Ile Phe Phe Phe Pro Tyr Leu
 1               5                  10                  15

Ser Leu Val Thr Leu Leu Gln Ala Arg Asn Leu Trp Val Ile His Arg
            20                  25                  30

Ala Ala Leu Cys Glu Ser Gly Leu Phe His Trp Arg Lys Gly Ile Glu
        35                  40                  45

Asn Gln Leu Glu Pro Met Tyr Phe Leu Pro His Gly Thr Leu Phe Leu
    50                  55                  60
```

```
<210> 450
<211> 34
<212> PRT
<213> Homo sapiens

<400> 450
Met Leu Tyr Ser Cys Glu Pro Tyr Leu Ile Ile Leu Asn Ile Tyr Ser
 1               5                  10                  15

Gln Lys Ala Phe Tyr Phe Tyr Phe Phe Glu Gly Ser Phe Ser Val Cys
            20                  25                  30

Thr Leu
```

```
<210> 451
<211> 89
<212> PRT
<213> Homo sapiens

<400> 451
Met Arg Gln Arg Gln Ala Ala Cys Gln Pro Pro Pro Ser Arg Asn Gly
 1               5                  10                  15

Leu Ala Gln Glu Cys Pro Pro His Ile Pro Ser Ser Phe Phe Leu Val
            20                  25                  30

Lys Leu Leu Phe Ile Pro Trp Leu Ala Ser Leu Leu Ser Ser Pro Leu
        35                  40                  45

Asn Leu Leu Leu Leu Val Ser Ile Ser Trp Asp Leu Gly Leu Lys Leu
    50                  55                  60
```

```
Asn Leu Gln Gln Cys Arg Gln His Gln Val Leu Gln Glu Lys Asn Thr
 65                  70                  75                  80

Lys Lys Phe Asn Lys Lys Lys Lys Lys
                 85
```

```
<210> 452
<211> 350
<212> PRT
<213> Homo sapiens

<400> 452
Met Asp Phe Ile Thr Ser Thr Ala Ile Leu Pro Leu Leu Phe Gly Cys
 1               5                  10                  15

Leu Gly Val Phe Gly Leu Phe Arg Leu Leu Gln Trp Val Arg Gly Lys
                20                  25                  30

Ala Tyr Leu Arg Asn Ala Val Val Val Ile Thr Gly Ala Thr Ser Gly
         35                  40                  45

Leu Gly Lys Glu Cys Ala Lys Val Phe Tyr Ala Ala Gly Ala Lys Leu
     50                  55                  60

Val Leu Cys Gly Arg Asn Gly Gly Ala Leu Glu Glu Leu Ile Arg Glu
 65                  70                  75                  80

Leu Thr Ala Ser His Ala Thr Lys Val Gln Thr His Lys Pro Tyr Leu
                85                  90                  95

Val Thr Phe Asp Leu Thr Asp Ser Gly Ala Ile Val Ala Ala Ala Ala
             100                 105                 110

Glu Ile Leu Gln Cys Phe Gly Tyr Val Asp Ile Leu Val Asn Asn Ala
         115                 120                 125

Gly Ile Ser Tyr Arg Gly Thr Ile Met Asp Thr Thr Val Asp Val Asp
     130                 135                 140

Lys Arg Val Met Glu Thr Asn Tyr Phe Gly Pro Val Ala Leu Thr Lys
145                 150                 155                 160

Ala Leu Leu Pro Ser Met Ile Lys Arg Arg Gln Gly His Ile Val Ala
                165                 170                 175

Ile Ser Ser Ile Gln Gly Lys Met Ser Ile Pro Phe Arg Ser Ala Tyr
             180                 185                 190

Ala Ala Ser Lys His Ala Thr Gln Ala Phe Phe Asp Cys Leu Arg Ala
         195                 200                 205

Glu Met Glu Gln Tyr Glu Ile Glu Val Thr Val Ile Ser Pro Gly Tyr
     210                 215                 220

Ile His Thr Asn Leu Ser Val Asn Ala Ile Thr Ala Asp Gly Ser Arg
225                 230                 235                 240
```

```
    Tyr Gly Val Met Asp Thr Thr Thr Ala Gln Gly Arg Ser Pro Val Glu
                    245                 250                 255

    Val Ala Gln Asp Val Leu Ala Ala Val Gly Lys Lys Lys Lys Asp Val
                    260                 265                 270

    Ile Leu Ala Asp Leu Leu Pro Ser Leu Ala Val Tyr Leu Arg Thr Leu
                275                 280                 285

    Ala Pro Gly Leu Phe Phe Ser Leu Met Pro Pro Gly Pro Glu Lys Ser
            290                 295                 300

    Gly Asn Pro Arg Thr Pro Ser Thr Leu Thr Ser Gln Gly Gln Gly Arg
    305                 310                 315                 320

    Glu Ala Ala Leu Leu Gly Leu Leu Thr Leu Gln Gly Thr Val Ala Phe
                    325                 330                 335

    Val Glu Thr Leu Met Glu Ile Cys Leu Thr Ser Gly Lys Asp
                    340                 345                 350


    <210> 453
    <211> 49
    <212> PRT
    <213> Homo sapiens

    <400> 453
    Met Val Phe Leu Pro Arg Gly Val Val Val Ser Gly Gly Ala Ala Cys
     1               5                   10                  15

    Leu Trp Leu Thr Phe Ile Leu Glu Thr Glu Val Tyr Leu Asp Leu Ala
                20                  25                  30

    Thr Glu Ala Arg Ala His Ser Arg Met Gly Leu Gly Leu Trp Pro Pro
                35                  40                  45

    Asn



    <210> 454
    <211> 278
    <212> PRT
    <213> Homo sapiens

    <220>
    <221> SITE
    <222> (194)
    <223> Xaa equals any of the naturally occurring L-amino acids

    <220>
    <221> SITE
    <222> (278)
    <223> Xaa equals stop translation

    <400> 454
    Met Ala Ser Ala Glu Leu Asp Tyr Thr Ile Glu Ile Pro Asp Gln Pro
```

```
 1                 5                    10                    15

Cys Trp Ser Gln Lys Asn Ser Pro Ser Pro Gly Gly Lys Glu Ala Glu
              20              25              30

Thr Arg Gln Pro Val Val Ile Leu Leu Gly Trp Gly Gly Cys Lys Asp
          35              40              45

Lys Asn Leu Ala Lys Tyr Ser Ala Ile Tyr His Lys Arg Gly Cys Ile
      50              55              60

Val Ile Arg Tyr Thr Ala Pro Trp His Met Val Phe Phe Ser Glu Ser
 65              70              75              80

Leu Gly Ile Pro Ser Leu Arg Val Leu Ala Gln Lys Leu Leu Glu Leu
              85              90              95

Leu Phe Asp Tyr Glu Ile Glu Lys Glu Pro Leu Leu Phe His Val Phe
              100             105             110

Ser Asn Gly Gly Val Met Leu Tyr Arg Tyr Val Leu Glu Leu Leu Gln
          115             120             125

Thr Arg Arg Phe Cys Arg Leu Arg Val Val Gly Thr Ile Phe Asp Ser
      130             135             140

Ala Pro Gly Asp Ser Asn Leu Val Gly Ala Leu Arg Ala Leu Ala Ala
145             150             155             160

Ile Leu Glu Arg Arg Ala Ala Met Leu Arg Leu Leu Leu Leu Val Ala
              165             170             175

Phe Ala Leu Val Val Val Leu Phe His Val Leu Leu Ala Pro Ile Thr
              180             185             190

Ala Xaa Phe His Thr His Phe Tyr Asp Arg Leu Gln Asp Ala Gly Ser
      195             200             205

Arg Trp Pro Glu Leu Tyr Leu Tyr Ser Arg Ala Asp Glu Val Val Leu
      210             215             220

Ala Arg Asp Ile Glu Arg Met Val Glu Ala Arg Leu Ala Arg Arg Val
225             230             235             240

Leu Ala Arg Ser Val Asp Phe Val Ser Ser Ala His Val Ser His Leu
              245             250             255

Arg Asp Tyr Pro Thr Tyr Tyr Thr Ser Leu Cys Val Asp Phe Met Arg
              260             265             270

Asn Cys Val Arg Cys Xaa
          275
```

<210> 455
<211> 199
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (199)
<223> Xaa equals stop translation

<400> 455
Met Ser Phe Ile Phe Asp Trp Ile Tyr Ser Gly Phe Ser Ser Val Leu
 1               5                  10                      15

Gln Phe Leu Gly Leu Tyr Lys Lys Thr Gly Lys Leu Val Phe Leu Gly
            20                  25                  30

Leu Asp Asn Ala Gly Lys Thr Thr Leu Leu His Met Leu Lys Asp Asp
        35                  40                  45

Arg Leu Gly Gln His Val Pro Thr Leu His Pro Thr Ser Glu Glu Leu
    50                  55                  60

Thr Ile Ala Gly Met Thr Phe Thr Thr Phe Asp Leu Gly Gly His Val
65                  70                  75                      80

Gln Ala Arg Arg Val Trp Lys Asn Tyr Leu Pro Ala Ile Asn Gly Ile
                85                  90                  95

Val Phe Leu Val Asp Cys Ala Asp His Glu Arg Leu Leu Glu Ser Lys
            100                 105                 110

Glu Glu Leu Asp Ser Leu Met Thr Asp Glu Thr Ile Ala Asn Val Pro
        115                 120                 125

Ile Leu Ile Leu Gly Asn Lys Ile Asp Arg Pro Glu Ala Ile Ser Glu
    130                 135                 140

Glu Arg Leu Arg Glu Met Phe Gly Leu Tyr Gly Gln Thr Thr Gly Lys
145                 150                 155                 160

Gly Ser Ile Ser Leu Lys Glu Leu Asn Ala Arg Pro Leu Glu Val Phe
                165                 170                 175

Met Cys Ser Val Leu Lys Arg Gln Gly Tyr Gly Glu Gly Phe Arg Trp
            180                 185                 190

Met Ala Gln Tyr Ile Asp Xaa
        195


<210> 456
<211> 258
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

```
<221> SITE
<222> (219)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (258)
<223> Xaa equals stop translation

<400> 456
Met Thr Leu Ser Arg Phe Ala Tyr Asn Gly Lys Arg Cys Pro Ser Ser
 1               5                   10                  15

Tyr Asn Ile Leu Asp Asn Ser Lys Ile Ile Ser Glu Glu Cys Arg Lys
            20                  25                  30

Glu Leu Thr Ala Leu Leu His His Tyr Pro Ile Glu Ile Asp Pro
        35                  40                  45

His Arg Thr Val Lys Glu Lys Leu Pro His Met Val Glu Trp Trp Thr
    50                  55                  60

Lys Ala His Asn Leu Leu Cys Gln Gln Lys Ile Gln Lys Phe Gln Ile
65                  70                  75                  80

Ala Gln Val Val Arg Glu Ser Asn Ala Met Leu Arg Glu Gly Tyr Lys
                85                  90                  95

Thr Phe Phe Asn Thr Leu Tyr His Asn Asn Ile Pro Leu Phe Ile Phe
            100                 105                 110

Ser Ala Gly Ile Gly Asp Ile Leu Glu Glu Ile Ile Arg Gln Met Lys
        115                 120                 125

Val Phe His Pro Asn Ile His Ile Val Ser Asn Tyr Met Asp Phe Asn
    130                 135                 140

Glu Asp Gly Phe Leu Gln Gly Phe Lys Gly Gln Leu Ile His Thr Tyr
145                 150                 155                 160

Asn Lys Asn Ser Ser Val Cys Glu Asn Xaa Gly Tyr Phe Gln Gln Leu
            165                 170                 175

Glu Gly Lys Thr Asn Val Ile Leu Leu Gly Asp Ser Ile Gly Asp Leu
        180                 185                 190

Thr Met Ala Asp Gly Val Pro Gly Val Gln Asn Ile Leu Lys Ile Gly
    195                 200                 205

Phe Leu Asn Asp Lys Val Glu Glu Arg Arg Xaa Arg Tyr Met Asp Ser
    210                 215                 220

Tyr Asp Ile Val Leu Glu Lys Asp Glu Thr Leu Asp Val Val Asn Gly
225                 230                 235                 240

Leu Leu Gln His Ile Leu Cys Gln Gly Val Gln Leu Glu Met Gln Gly
            245                 250                 255
```

Pro Xaa

<210> 457
<211> 87
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 457
Met Ser His Val Leu Leu Cys Pro Ser Leu Ser Cys Ser Asn Leu Leu
1   5   10   15

Pro Pro Ser His Ser Leu Gly Thr Met Gly Ser Leu Ser Pro His Leu
            20   25   30

Cys Gly His Thr Met Cys Pro Val Asn Pro Glu Leu Pro Leu Ser Ser
        35   40   45

Arg Leu Thr Thr Asp Gln Pro Gln Pro Asp Ala Cys Ser Pro Thr Leu
    50   55   60

Leu Thr Leu Pro Leu Pro Ser Ser Phe Leu Pro His Ser Lys Pro Thr
65   70   75   80

Phe Xaa His Pro Cys Ser Pro
                85

<210> 458
<211> 315
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (315)
<223> Xaa equals stop translation

<400> 458
Met Phe Ser Ile Asn Pro Leu Glu Asn Leu Lys Val Tyr Ile Ser Ser
1   5   10   15

Arg Pro Pro Leu Val Val Phe Met Ile Ser Val Xaa Pro Met Ala Ile
            20   25   30

Ala Phe Leu Thr Leu Gly Tyr Phe Phe Lys Ile Lys Glu Ile Lys Ser
        35   40   45

```
Pro Glu Met Ala Glu Asp Trp Asn Thr Phe Leu Leu Arg Phe Asn Asp
    50                      55                      60

Leu Asp Leu Cys Val Ser Glu Asn Glu Thr Leu Lys His Leu Thr Asn
 65                  70                  75                      80

Asp Thr Thr Thr Pro Glu Ser Thr Met Thr Ser Gly Gln Ala Arg Ala
                85                  90                  95

Ser Thr Gln Ser Pro Gln Ala Leu Glu Asp Ser Gly Pro Val Asn Ile
                100                 105                 110

Ser Val Ser Ile Thr Leu Thr Leu Asp Pro Leu Lys Pro Phe Gly Gly
            115                 120                 125

Tyr Ser Arg Asn Val Thr His Leu Tyr Ser Thr Ile Leu Gly His Gln
        130                 135                 140

Ile Gly Leu Ser Gly Arg Glu Ala His Glu Glu Ile Asn Ile Thr Phe
145                 150                 155                     160

Thr Leu Pro Thr Ala Trp Ser Ser Asp Cys Ala Leu His Gly His His
                165                 170                 175

Cys Glu Gln Val Val Phe Thr Ala Cys Met Thr Leu Thr Ala Ser Pro
            180                 185                 190

Gly Val Phe Pro Val Thr Val Gln Pro Pro His Cys Val Pro Asp Thr
        195                 200             .       205

Tyr Ser Asn Ala Thr Leu Trp Tyr Lys Ile Phe Thr Thr Ala Arg Asp
        210                 215                 220

Ala Asn Thr Lys Tyr Ala Gln Asp Tyr Asn Pro Phe Trp Cys Tyr Lys
225                 230                 235                     240

Gly Ala Ile Gly Lys Val Tyr His Ala Leu Asn Pro Lys Leu Thr Val
                245                 250                 255

Ile Val Pro Asp Asp Arg Ser Leu Ile Asn Leu His Leu Met His His
                260                 265                 270

Thr Ser Tyr Phe Leu Phe Val Met Val Ile Thr Met Phe Cys Tyr Ala
        275                 280                 285

Val Ile Lys Gly Arg Pro Ser Lys Leu Arg Gln Ser Asn Pro Glu Phe
        290                 295                 300

Cys Pro Glu Lys Val Ala Leu Ala Glu Ala Xaa
305                 310                 315
```

<210> 459
<211> 52
<212> PRT
<213> Homo sapiens

<400> 459
Met Pro Gly Leu Ser Leu Ala Leu Leu Pro Phe Gly Pro Gly Cys Thr
 1   5   10   15

Glu Ala Leu His Ala Gly Cys Phe Pro Ala Phe Ala Ser Ala Thr Arg
             20   25   30

Val Asn Gly Glu Ala Ala Leu Ser Pro Gly Leu Cys Asp Pro Ile Ser
         35   40   45

Val Pro Tyr Val
     50

<210> 460
<211> 383
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (383)
<223> Xaa equals stop translation

<400> 460
Met Ala Val Gly Gln Ile Met Thr Phe Gly Ser Pro Val Ile Gly Cys
 1   5   10   15

Gly Phe Ile Ser Gly Trp Asn Leu Val Ser Met Cys Val Glu Tyr Val
             20   25   30

Leu Leu Trp Lys Val Tyr Gln Lys Thr Pro Ala Leu Ala Val Lys Ala
         35   40   45

Gly Leu Lys Glu Glu Glu Thr Glu Leu Lys Gln Leu Asn Leu His Lys
     50   55   60

Asp Thr Glu Pro Lys Pro Leu Glu Gly Thr His Leu Met Gly Val Lys
 65   70   75   80

Asp Ser Asn Ile His Glu Leu Glu His Glu Gln Glu Pro Thr Cys Ala
             85   90   95

Ser Gln Met Ala Glu Pro Phe Arg Thr Phe Arg Asp Gly Trp Val Ser
             100   105   110

Tyr Tyr Asn Gln Pro Val Phe Leu Ala Gly Met Gly Leu Ala Phe Leu
         115   120   125

Tyr Met Thr Val Leu Gly Phe Asp Cys Ile Thr Thr Gly Tyr Ala Tyr
     130   135   140

Thr Gln Gly Leu Ser Gly Phe His Pro Gln Tyr Phe Asp Gly Ser Ile
145   150   155   160

Ser Tyr Asn Trp Asn Asn Gly Asn Cys Ser Phe Tyr Leu Ala Thr Ser
             165   170   175

```
Lys Met Trp Phe Gly Ser Ala Gly Leu Ile Ser Gly Leu Ala Gln Leu
            180                 185                 190

Ser Cys Leu Ile Leu Cys Val Ile Ser Val Phe Met Pro Gly Ser Pro
        195                 200                 205

Leu Asp Leu Ser Val Ser Pro Phe Glu Asp Ile Arg Ser Arg Phe Ile
    210                 215                 220

Gln Gly Glu Ser Ile Thr Pro Thr Lys Ile Pro Glu Ile Thr Thr Glu
225                 230                 235                 240

Ile Tyr Met Ser Asn Gly Ser Asn Ser Ala Asn Ile Val Pro Glu Thr
                245                 250                 255

Ser Pro Glu Ser Val Pro Ile Ile Ser Val Ser Leu Leu Phe Ala Gly
            260                 265                 270

Val Ile Ala Ala Arg Ile Gly Leu Trp Ser Phe Asp Leu Thr Val Thr
        275                 280                 285

Gln Leu Leu Gln Glu Asn Val Ile Glu Ser Glu Arg Gly Ile Ile Asn
    290                 295                 300

Gly Val Gln Asn Ser Met Asn Tyr Leu Leu Asp Leu Leu His Phe Ile
305                 310                 315                 320

Met Val Ile Leu Ala Pro Asn Pro Glu Ala Phe Gly Leu Leu Val Leu
                325                 330                 335

Ile Ser Val Ser Phe Val Ala Met Gly His Ile Met Tyr Phe Arg Phe
                340                 345                 350

Ala Gln Asn Thr Leu Gly Asn Lys Leu Phe Ala Cys Gly Pro Asp Ala
        355                 360                 365

Lys Glu Val Arg Lys Glu Asn Gln Ala Asn Thr Ser Val Val Xaa
    370                 375                 380


<210> 461
<211> 186
<212> PRT
<213> Homo sapiens

<400> 461
Met Arg Ser Ile Gly Asn Lys Asn Thr Ile Leu Leu Gly Leu Gly Phe
1               5                   10                  15

Gln Ile Leu Gln Leu Ala Trp Tyr Gly Phe Gly Ser Glu Pro Trp Met
            20                  25                  30

Met Trp Ala Ala Gly Ala Val Ala Ala Met Ser Ser Ile Thr Phe Pro
        35                  40                  45

Ala Val Ser Ala Leu Val Ser Arg Thr Ala Asp Ala Asp Gln Gln Gly
    50                  55                  60
```

Val Val Gln Gly Met Ile Thr Gly Ile Arg Gly Leu Cys Asn Gly Leu
 65   70   75   80

Gly Pro Ala Leu Tyr Gly Phe Ile Phe Tyr Ile Phe His Val Glu Leu
                 85   90   95

Lys Glu Leu Pro Ile Thr Gly Thr Asp Leu Gly Thr Asn Thr Ser Pro
             100   105   110

Gln His His Phe Glu Gln Asn Ser Ile Ile Pro Gly Pro Pro Phe Leu
         115   120   125

Phe Gly Ala Cys Ser Val Leu Leu Ala Leu Leu Val Ala Leu Phe Ile
     130   135   140

Pro Glu His Thr Asn Leu Ser Leu Arg Ser Ser Ser Trp Arg Lys His
145   150   155   160

Cys Gly Ser His Ser His Pro His Asn Thr Gln Ala Pro Gly Glu Ala
                 165   170   175

Lys Glu Pro Leu Leu Gln Asp Thr Asn Val
             180   185

<210> 462
<211> 163
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (163)
<223> Xaa equals stop translation

<400> 462
Met Leu Gln Thr Ser Asn Tyr Ser Leu Val Leu Ser Leu Gln Phe Leu
  1   5   10   15

Leu Leu Ser Tyr Asp Leu Phe Val Asn Ser Phe Ser Glu Leu Leu Gln
                 20   25   30

Lys Thr Pro Val Ile Gln Leu Val Leu Phe Ile Ile Gln Asp Ile Ala
             35   40   45

Val Leu Phe Asn Ile Ile Ile Ile Phe Leu Met Phe Phe Asn Thr Phe
     50   55   60

Val Phe Gln Ala Gly Leu Val Asn Leu Leu Phe His Lys Phe Lys Gly
 65   70   75   80

Thr Ile Ile Leu Thr Ala Val Tyr Phe Ala Leu Ser Ile Ser Leu His
                 85   90   95

Val Trp Val Met Asn Leu Arg Trp Lys Asn Ser Asn Ser Phe Ile Trp
             100   105   110

Thr Asp Gly Leu Gln Met Leu Phe Val Phe Gln Arg Leu Ala Ala Val

```
        115                 120                 125
Leu Tyr Cys Tyr Phe Tyr Lys Arg Thr Ala Val Arg Leu Gly Asp Pro
    130                 135                 140

His Phe Tyr Gln Asp Ser Leu Trp Leu Arg Lys Glu Phe Met Gln Val
145                 150                 155                 160

Arg Arg Xaa
```

```
<210> 463
<211> 46
<212> PRT
<213> Homo sapiens

<400> 463
Met Arg Ile Gln Val Phe Ile Leu Leu Leu Gly Ala Gly Gly Thr Ser
 1               5                  10                  15

Gln Phe Thr Lys Pro Pro Ser Leu Pro Leu Glu Pro Glu Pro Ala Val
                20                  25                  30

Glu Ser Ser Pro Thr Glu Thr Ser Glu Gln Ile Arg Glu Lys
            35                  40                  45
```

```
<210> 464
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (105)
<223> Xaa equals stop translation

<400> 464
Met Ser Tyr Leu Ala Phe Leu Tyr Met Thr Phe Asp Phe Cys Cys Leu
 1               5                  10                  15

Tyr Phe Ser Thr Val Tyr Ala Pro Ser Phe Lys Tyr Ile Cys Val His
                20                  25                  30

Thr Asp Thr His Ile Cys Val Cys Val Cys Ile Tyr Leu Ser Ser Val
            35                  40                  45

Val Ser Lys Ser Ser Ala Glu Ala Asp Gly Val Leu Gln Pro Arg Arg
        50                  55                  60

His Pro Ala Ser Leu Leu Ile Val Phe Ala Thr Ser Ile Ser Glu Ser
 65                 70                  75                  80

Ser Leu Leu Ile Phe Ser Phe Gln Lys Thr Glu Ala Lys Leu Ile Val
                85                  90                  95

Phe Ala Val Ser Leu Ala Ala Lys Xaa
```

100   105

<210> 465
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (70)
<223> Xaa equals stop translation

<400> 465
Met Leu Pro Pro Phe Ser Leu Val Tyr Thr His Phe Leu Val Ala Ser
 1   5   10   15

Leu Leu Pro Val Ile Leu Ala Val Phe Pro Asp Ser Ala Gln Ile Val
            20   25   30

Pro Leu Leu Lys Pro Ile Pro Arg Pro Gln Pro Glu Val Ile Phe Pro
        35   40   45

Ser Ser Glu Leu Leu Glu Gln Leu Leu Ser Val Gln Phe Val Trp Gln
    50   55   60

Ala His Thr Val Ala Xaa
 65   70

<210> 466
<211> 155
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (155)
<223> Xaa equals stop translation

<400> 466
Met Ala Leu Leu Leu Ser Val Leu Arg Val Leu Leu Gly Gly Phe Phe
 1   5   10   15

Ala Leu Val Gly Leu Ala Lys Leu Ser Glu Glu Ile Ser Ala Pro Val
            20   25   30

Ser Glu Arg Met Asn Ala Leu Phe Val Gln Phe Ala Glu Val Phe Pro
        35   40   45

Leu Lys Val Phe Gly Tyr Gln Pro Asp Pro Leu Asn Tyr Gln Ile Ala
    50   55   60

Val Gly Phe Leu Glu Leu Leu Ala Gly Leu Leu Leu Val Met Gly Pro
 65   70   75   80

Pro Met Leu Gln Glu Ile Ser Asn Leu Phe Leu Ile Leu Leu Met Met
                85   90   95

```
Gly Ala Ile Phe Thr Leu Ala Ala Leu Lys Glu Ser Leu Ser Thr Cys
            100                 105                 110

Ile Pro Ala Ile Val Cys Leu Gly Phe Leu Leu Leu Leu Asn Val Gly
        115                 120                 125

Gln Leu Leu Ala Gln Thr Lys Lys Val Val Arg Pro Thr Arg Lys Lys
    130                 135                 140

Thr Leu Ser Thr Phe Lys Glu Ser Trp Lys Xaa
145                 150                 155
```

```
<210> 467
<211> 332
<212> PRT
<213> Homo sapiens
```

```
<400> 467
Met Lys Leu Gly Arg Ala Val Leu Gly Leu Leu Leu Leu Ala Pro Ser
  1               5                   10                  15

Val Val Gln Ala Val Glu Pro Ile Ser Leu Gly Leu Ala Leu Ala Gly
                20                  25                  30

Val Leu Thr Gly Tyr Ile Tyr Pro Arg Leu Tyr Cys Leu Phe Ala Glu
            35                  40                  45

Cys Cys Gly Gln Lys Arg Ser Leu Ser Arg Glu Ala Leu Gln Lys Asp
        50                  55                  60

Leu Asp Asp Asn Leu Phe Gly Gln His Leu Ala Lys Lys Ile Ile Leu
65                  70                  75                  80

Asn Ala Val Phe Gly Phe Ile Asn Asn Pro Lys Pro Lys Lys Pro Leu
                85                  90                  95

Thr Leu Ser Leu His Gly Trp Thr Gly Thr Gly Lys Asn Phe Val Ser
            100                 105                 110

Lys Ile Ile Ala Glu Asn Ile Tyr Glu Gly Gly Leu Asn Ser Asp Tyr
        115                 120                 125

Val His Leu Phe Val Ala Thr Leu His Phe Pro His Ala Ser Asn Ile
    130                 135                 140

Thr Leu Tyr Lys Asp Gln Leu Gln Leu Trp Ile Arg Gly Asn Val Ser
145                 150                 155                 160

Ala Cys Ala Arg Ser Ile Phe Ile Phe Asp Glu Met Asp Lys Met His
                165                 170                 175

Ala Gly Leu Ile Asp Ala Ile Lys Pro Phe Leu Asp Tyr Tyr Asp Leu
            180                 185                 190

Val Asp Gly Val Ser Tyr Gln Lys Ala Met Phe Ile Phe Leu Ser Asn
            195                 200                 205
```

```
Ala Gly Ala Glu Arg Ile Thr Asp Val Ala Leu Asp Phe Trp Arg Ser
    210                     215                 220

Gly Lys Gln Arg Glu Asp Ile Lys Leu Lys Asp Ile Glu His Ala Leu
225                     230                 235                 240

Ser Val Ser Val Phe Asn Asn Lys Asn Ser Gly Phe Trp His Ser Ser
                    245                 250                 255

Leu Ile Asp Arg Asn Leu Ile Asp Tyr Phe Val Pro Phe Leu Pro Leu
                260                 265                 270

Glu Tyr Lys His Leu Lys Met Cys Ile Arg Val Glu Met Gln Ser Arg
            275                 280                 285

Gly Tyr Glu Ile Asp Glu Asp Ile Val Ser Arg Val Ala Glu Glu Met
    290                 295                 300

Thr Phe Phe Pro Lys Glu Glu Arg Val Phe Ser Asp Lys Gly Cys Lys
305                 310                 315                 320

Thr Val Phe Thr Lys Leu Asp Tyr Tyr Tyr Asp Asp
                325                 330


<210> 468
<211> 48
<212> PRT
<213> Homo sapiens

<400> 468
Met Val Val Phe Ser Phe Phe Lys Pro Val Leu Val Ile Arg Met Tyr
1                   5                   10                  15

Leu Thr Val Leu Trp Asn Asn Cys Asp Tyr Ser Lys Val Ile Val Phe
                20                  25                  30

Lys Asn Val Ile Tyr Thr Cys Tyr Ile His Phe Ser Pro Ser Lys Tyr
            35                  40                  45



<210> 469
<211> 548
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (219)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (220)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 469
Met Ala Lys Phe Met Thr Pro Val Ile Gln Asp Asn Pro Ser Gly Trp
1   5   10   15

Gly Pro Cys Ala Val Pro Glu Gln Pro Arg Asp Met Pro Tyr Gln Pro
            20   25   30

Phe Ser Lys Gly Asp Arg Leu Gly Lys Val Ala Asp Trp Thr Gly Ala
        35   40   45

Thr Tyr Gln Asp Lys Arg Tyr Thr Asn Lys Tyr Ser Ser Gln Phe Gly
    50   55   60

Gly Gly Ser Gln Tyr Ala Tyr Phe His Glu Glu Asp Glu Ser Ser Phe
65   70   75   80

Gln Leu Val Asp Thr Ala Arg Thr Gln Lys Thr Ala Tyr Gln Arg Asn
                85   90   95

Arg Met Arg Phe Ala Gln Arg Asn Leu Arg Arg Asp Lys Asp Arg Arg
                100   105   110

Asn Met Leu Gln Phe Asn Leu Gln Ile Leu Pro Lys Ser Ala Lys Gln
        115   120   125

Lys Glu Arg Glu Arg Ile Arg Leu Gln Lys Lys Phe Gln Lys Gln Phe
    130   135   140

Gly Val Arg Gln Lys Trp Asp Gln Lys Ser Gln Lys Pro Arg Asp Ser
145   150   155   160

Ser Val Glu Val Arg Ser Asp Trp Glu Val Lys Glu Glu Met Asp Phe
                165   170   175

Pro Gln Leu Met Lys Met Arg Tyr Leu Glu Val Ser Glu Pro Gln Asp
            180   185   190

Ile Glu Cys Cys Gly Ala Leu Glu Tyr Tyr Asp Lys Ala Phe Asp Arg
        195   200   205

Ile Thr Thr Arg Ser Glu Lys Pro Leu Arg Xaa Xaa Lys Arg Ile Phe
    210   215   220

His Thr Val Thr Thr Thr Asp Asp Pro Val Ile Arg Lys Leu Ala Lys
225   230   235   240

Thr Gln Gly Asn Val Phe Ala Thr Asp Ala Ile Leu Ala Thr Leu Met
                245   250   255

Ser Cys Thr Arg Ser Val Tyr Ser Trp Asp Ile Val Val Gln Arg Val
        260   265   270

Gly Ser Lys Leu Phe Phe Asp Lys Arg Asp Asn Ser Asp Phe Asp Leu
    275   280   285

Leu Thr Val Ser Glu Thr Ala Asn Glu Pro Pro Gln Asp Glu Gly Asn

```
        290                    295                      300

Ser Phe Asn Ser Pro Arg Asn Leu Ala Met Glu Ala Thr Tyr Ile Asn
305                    310                    315                    320

His Asn Phe Ser Gln Gln Cys Leu Arg Met Gly Lys Glu Arg Tyr Asn
                   325                    330                    335

Phe Pro Asn Pro Asn Pro Phe Val Glu Asp Asp Met Asp Lys Asn Glu
                   340                    345                    350

Ile Ala Ser Val Ala Tyr Arg Tyr Arg Ser Gly Lys Leu Gly Asp Asp
        355                    360                    365

Ile Asp Leu Ile Val Arg Cys Glu His Asp Gly Val Met Thr Gly Ala
    370                    375                    380

Asn Gly Glu Val Ser Phe Ile Asn Ile Lys Thr Leu Asn Glu Trp Asp
385                    390                    395                    400

Ser Arg His Cys Asn Gly Val Asp Trp Arg Gln Lys Leu Asp Ser Gln
                   405                    410                    415

Arg Gly Ala Val Ile Ala Thr Glu Leu Lys Asn Asn Ser Tyr Lys Leu
            420                    425                    430

Ala Arg Trp Thr Cys Cys Ala Leu Ala Gly Ser Glu Glu Tyr Leu Lys
        435                    440                    445

Leu Gly Tyr Val Ser Arg Tyr His Val Lys Asp Ser Ser Arg His Val
    450                    455                    460

Ile Leu Gly Thr Gln Gln Phe Lys Pro Asn Glu Phe Ala Ser Gln Ile
465                    470                    475                    480

Asn Leu Ser Val Glu Asn Ala Trp Gly Tyr Ile Leu Arg Cys Val Ile Asp
                   485                    490                    495

Ile Cys Met Lys Leu Glu Glu Gly Lys Tyr Leu Ile Leu Lys Asp Pro
            500                    505                    510

Asn Lys Gln Val Ile Arg Val Tyr Ser Leu Pro Asp Gly Thr Phe Ser
            515                    520                    525

Ser Asp Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu
        530                    535                    540

Glu Glu Glu Thr
545
```

```
<210> 470
<211> 285
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

<222> (191)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (217)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 470

```
Met Lys Leu His Pro Pro Pro Pro Ser Pro Val Thr Gln Asp His Arg
 1               5                   10                  15

Ser Lys Ser Ser His Ser Asn Trp Met Pro Arg Met Gly Ala Cys Ser
                20                  25                  30

Met Ser Arg Thr Ser Ser Ser Gly Pro Pro Ser Leu Cys Lys Ser Thr
            35                  40                  45

Ser Gly Arg Ser Cys Thr Arg Pro His Cys Trp Pro Ser Leu Pro Ala
        50                  55                  60

Trp Val Ser Val Phe Thr Arg Thr Asn Thr Gly Ser Trp Cys Tyr Pro
65                  70                  75                  80

Ala Trp Gly Gly Ala Phe Ser Arg Pro Trp Met Ser Ala Gln Ser Met
                85                  90                  95

Cys Cys Ala Glu Arg Ser Val Leu Gln Val Ala Cys Arg Leu Leu Asp
            100                 105                 110

Ala Leu Glu Phe Leu His Glu Asn Glu Tyr Val His Gly Asn Val Thr
        115                 120                 125

Ala Glu Asn Ile Phe Val Asp Pro Glu Asp Gln Ser Gln Val Thr Leu
    130                 135                 140

Ala Gly Tyr Gly Phe Ala Phe Arg Tyr Cys Pro Ser Gly Lys His Val
145                 150                 155                 160

Ala Tyr Val Glu Gly Ser Arg Ser Pro His Glu Gly Asp Leu Glu Phe
                165                 170                 175

Ile Ser Met Asp Leu His Lys Gly Cys Gly Pro Ser Arg Arg Xaa Asp
            180                 185                 190

Leu Gln Ser Leu Gly Tyr Cys Met Leu Lys Trp Leu Tyr Gly Phe Leu
        195                 200                 205

Pro Trp Thr Asn Cys Leu Pro Xaa Xaa Glu Asp Ile Met Lys Gln Lys
    210                 215                 220

Gln Lys Phe Val Asp Lys Pro Gly Phe Val Gly Pro Cys Gly His
225                 230                 235                 240
```

```
Trp Ile Arg Pro Ser Glu Thr Leu Gln Lys Tyr Leu Lys Val Val Met
              245                 250                 255

Ala Leu Thr Tyr Glu Glu Lys Pro Pro Tyr Ala Met Leu Arg Asn Asn
              260                 265                 270

Leu Glu Ala Leu Leu Gln Asp Leu Arg Val Ser Pro Tyr
          275                 280                 285
```

```
<210> 471
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals stop translation

<400> 471
Met Thr Ser Pro Pro Pro His Gln Gly Trp Glu Gln Arg Gly Cys Gly
  1               5                 10                  15

Glu Ser Gln Val Pro Leu Ala Leu Ser Arg Val Phe Ser Thr Ser His
              20                  25                  30

Tyr Cys Leu Leu Leu Val Ala Asn Gln Ser Ile Phe Phe Pro Cys Leu
          35                  40                  45

Trp Ala Val Glu Arg Leu Leu Gly Val Arg Cys Thr Cys Pro Leu Ser
      50                  55                  60

Trp Gly Lys Arg Ile Ile Ser Glu His Cys Ser Ala Gln Ser Ser Xaa
  65                  70                  75                  80
```

```
<210> 472
<211> 47
<212> PRT
<213> Homo sapiens

<400> 472
Met His Thr Trp Tyr Asn Asp Arg Arg Gln Asn Cys His Cys Leu Leu
  1               5                 10                  15

Phe Phe Leu Ile Tyr Leu Arg Lys Ile Tyr Gln Val Val Pro His Val
              20                  25                  30

Pro Leu Val Val Lys Cys Arg Gly Arg Leu Lys Gly Val Asn Ile
          35                  40                  45
```

```
<210> 473
```

<211> 96
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (96)
<223> Xaa equals stop translation

<400> 473
```
Met Glu Leu Val Leu Val Phe Leu Cys Ser Leu Leu Ala Pro Met Val
 1               5                  10                  15

Leu Ala Ser Ala Ala Glu Lys Glu Lys Glu Met Asp Pro Phe His Tyr
            20                  25                  30

Asp Tyr Gln Thr Leu Arg Ile Gly Gly Leu Val Phe Ala Val Val Leu
        35                  40                  45

Phe Ser Val Gly Ile Leu Leu Ile Leu Ser Arg Arg Cys Lys Cys Ser
    50                  55                  60

Phe Asn Gln Lys Pro Arg Ala Pro Gly Asp Glu Glu Ala Gln Val Glu
 65                  70                  75                  80

Asn Leu Ile Thr Ala Asn Ala Thr Glu Pro Gln Lys Ala Glu Asn Xaa
            85                  90                  95
```

<210> 474
<211> 399
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (399)
<223> Xaa equals stop translation

<400> 474
```
Met Ala Ser Gly Ala Asp Ser Lys Gly Asp Asp Leu Ser Thr Ala Ile
 1               5                  10                  15

Leu Lys Gln Lys Asn Arg Pro Asn Arg Leu Ile Val Asp Glu Ala Ile
            20                  25                  30

Asn Glu Asp Asn Ser Val Val Ser Leu Ser Gln Pro Lys Met Asp Glu
        35                  40                  45

Leu Gln Leu Phe Arg Gly Asp Thr Val Leu Leu Lys Gly Lys Lys Arg
    50                  55                  60

Arg Glu Ala Val Cys Ile Val Leu Ser Asp Asp Thr Cys Ser Asp Glu
 65                  70                  75                  80
```

```
Lys Ile Arg Met Asn Arg Val Val Arg Asn Asn Leu Arg Val Arg Leu
                85              90                  95

Gly Asp Val Ile Ser Ile Gln Pro Cys Pro Asp Val Lys Tyr Gly Lys
            100             105             110

Arg Ile His Val Leu Pro Ile Asp Thr Val Glu Gly Ile Thr Gly
        115             120             125

Asn Leu Phe Glu Val Tyr Leu Lys Pro Tyr Phe Leu Glu Ala Tyr Arg
    130             135             140

Pro Ile Arg Lys Gly Asp Ile Phe Leu Val Arg Gly Gly Met Arg Ala
145             150             155             160

Val Glu Phe Lys Val Val Glu Thr Asp Pro Ser Pro Tyr Cys Ile Val
            165             170             175

Ala Pro Asp Thr Val Ile His Cys Glu Gly Glu Pro Ile Lys Arg Glu
            180             185             190

Asp Glu Glu Glu Ser Leu Asn Glu Val Gly Tyr Asp Asp Ile Gly Gly
        195             200             205

Cys Arg Lys Gln Leu Ala Gln Ile Lys Glu Met Val Glu Leu Pro Leu
    210             215             220

Arg His Pro Ala Leu Phe Lys Ala Ile Gly Val Lys Pro Pro Arg Gly
225             230             235             240

Ile Leu Leu Tyr Gly Pro Pro Gly Thr Gly Lys Thr Leu Ile Ala Arg
            245             250             255

Ala Val Ala Asn Glu Thr Gly Ala Phe Phe Phe Leu Ile Asn Gly Pro
        260             265             270

Glu Ile Met Ser Lys Leu Ala Gly Glu Ser Glu Ser Asn Leu Arg Lys
    275             280             285

Ala Phe Glu Glu Ala Glu Lys Asn Ala Pro Ala Ile Ile Phe Ile Asp
290             295             300

Glu Leu Asp Ala Ile Ala Pro Lys Arg Glu Lys Thr His Gly Glu Val
305             310             315             320

Glu Arg Arg Ile Val Ser Gln Leu Leu Thr Leu Met Asp Gly Leu Lys
            325             330             335

Gln Arg Ala His Val Ile Val Met Ala Ala Thr Asn Arg Pro Asn Ser
        340             345             350

Ile Asp Pro Ala Leu Arg Arg Phe Gly Arg Phe Asp Arg Glu Val Asp
        355             360             365

Ile Gly Ile Pro Asp Ala Thr Gly Arg Leu Glu Ile Leu Gln Ile His
    370             375             380

Thr Lys Asn Met Lys Leu Ala Asp Asp Val Asp Leu Glu Gln Xaa
```

385   390   395

<210> 475
<211> 45
<212> PRT
<213> Homo sapiens

<400> 475
Met Tyr Met Lys Thr Asn Leu Ser Leu Val Ser Leu Lys Tyr Leu Phe
 1   5   10   15

Phe Leu Thr Cys Glu Met Phe Glu Arg Arg Phe Ser Ile His Phe Ser
           20   25   30

Ala Ala Trp Arg Lys Leu Gly Asn Asp Phe Phe Gln Leu
        35   40   45

<210> 476
<211> 273
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (181)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (202)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (203)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (204)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (211)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (214)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (273)
<223> Xaa equals stop translation

<400> 476
Met Ala Ala Pro Lys Gly Ser Leu Trp Val Arg Thr Gln Leu Gly Leu
1   5   10   15

Pro Pro Leu Leu Leu Leu Thr Met Ala Leu Ala Gly Gly Ser Gly Thr
            20   25   30

Ala Ser Ala Glu Ala Phe Asp Ser Val Leu Gly Asp Thr Ala Ser Cys
        35   40   45

His Arg Ala Cys Gln Leu Thr Tyr Pro Leu His Thr Tyr Pro Lys Glu
        50   55   60

Glu Glu Leu Tyr Ala Cys Gln Arg Gly Cys Arg Leu Phe Ser Ile Cys
65   70   75   80

Gln Phe Val Asp Asp Gly Ile Asp Leu Asn Arg Thr Lys Leu Glu Cys
                85   90   95

Glu Ser Ala Cys Thr Glu Ala Tyr Ser Gln Ser Asp Glu Gln Tyr Ala
            100   105   110

Cys His Leu Gly Cys Gln Asn Gln Leu Pro Phe Ala Glu Leu Arg Gln
        115   120   125

Glu Gln Leu Met Ser Leu Met Pro Lys Met His Leu Leu Phe Pro Leu
    130   135   140

Thr Leu Val Arg Ser Phe Trp Ser Asp Met Met Asp Ser Ala Gln Ser
145   150   155   160

Phe Ile Thr Ser Ser Trp Thr Phe Tyr Leu Gln Ala Asp Asp Gly Lys
                165   170   175

Ile Val Ile Phe Xaa Ser Lys Pro Arg Asn Pro Arg Tyr Ala Pro His
            180   185   190

Leu Glu Pro Gly Ala Leu Pro Asn Leu Xaa Xaa Xaa Ser Leu Ser Lys
        195   200   205

Met Ser Xaa Xaa Ser Xaa Met Arg Asn Ser Gln Ala His Arg Asn Phe
    210   215   220

Leu Glu Asp Gly Glu Ser Asp Gly Phe Leu Arg Cys Leu Ser Leu Asn
225   230   235   240

Ser Gly Trp Ile Leu Thr Thr Thr Leu Val Leu Ser Val Met Val Leu
            245   250   255

Leu Trp Ile Cys Cys Ala Thr Cys Cys Tyr Thr Leu Leu Asp Ala Val
        260   265   270

Xaa

<210> 477
<211> 192
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 477
Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe Ser
 1   5   10   15

Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr Pro
                20   25   30

Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile Ala
            35   40   45

Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val Gly
        50   55   60

Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu Ser
65   70   75   80

Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu Asp
                85   90   95

Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His Asp
                100   105   110

Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala Gly
            115   120   125

Xaa Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu Ala
    130   135   140

Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe Pro
145   150   155   160

Gly Ser Val Leu Phe Leu Pro His Ser Tyr Ile Gly Asn Ser Gly Met
                165   170   175

Ser Ser Lys Met Thr His Asp Cys Gly Tyr Glu Glu Leu Leu Thr Ser
            180   185   190

<210> 478
<211> 234
<212> PRT

<213> Homo sapiens

<400> 478
Met Arg Lys Thr Arg Leu Trp Gly Leu Leu Trp Met Leu Phe Val Ser
 1   5   10   15

Glu Leu Arg Ala Ala Thr Lys Leu Thr Glu Glu Lys Tyr Glu Leu Lys
            20   25   30

Glu Gly Gln Thr Leu Asp Val Lys Cys Asp Tyr Thr Leu Glu Lys Phe
        35   40   45

Ala Ser Ser Gln Lys Ala Trp Gln Ile Ile Arg Asp Gly Glu Met Pro
    50   55   60

Lys Thr Leu Ala Cys Thr Glu Arg Pro Ser Lys Asn Ser His Pro Val
65   70   75   80

Gln Val Gly Arg Ile Ile Leu Glu Asp Tyr His Asp His Gly Leu Leu
                85   90   95

Arg Val Arg Met Val Asn Leu Gln Val Glu Asp Ser Gly Leu Tyr Gln
            100   105   110

Cys Val Ile Tyr Gln Pro Pro Lys Glu Pro His Met Leu Phe Asp Arg
        115   120   125

Ile Arg Leu Val Val Thr Lys Gly Phe Ser Gly Thr Pro Gly Ser Asn
    130   135   140

Glu Asn Ser Thr Gln Asn Val Tyr Lys Ile Pro Pro Thr Thr Thr Lys
145   150   155   160

Ala Leu Cys Pro Leu Tyr Thr Ser Pro Arg Thr Val Thr Gln Ala Pro
                165   170   175

Pro Lys Ser Thr Ala Asp Val Ser Thr Pro Asp Ser Glu Ile Asn Leu
            180   185   190

Thr Asn Val Thr Asp Ile Ile Arg Val Pro Val Phe Asn Ile Val Ile
        195   200   205

Leu Leu Ala Gly Gly Phe Leu Ser Lys Ser Leu Val Phe Ser Val Leu
    210   215   220

Phe Ala Val Thr Leu Arg Ser Phe Val Pro
225   230

<210> 479
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (105)
<223> Xaa equals stop translation

<400> 479
Met Leu His Ile Leu Pro Leu Lys Ser Tyr Asp Phe Pro His Phe Ser
1   5   10   15

Leu Met Gly Arg Tyr Arg Cys Ala Ser Leu Leu Phe Cys Phe Leu Leu
                20   25   30

Leu Phe Phe Phe Phe Cys Ser Val Leu Trp Thr Phe Ser Asp Met His
            35   40   45

Arg Ser Gly Glu Asp Gly Pro Trp Thr Pro Cys Val His His Leu Ala
        50   55   60

Ala Ser Leu Ile Ser Tyr Gly Gln Pro Gly Phe Ile Cys Ile Ser Leu
65   70   75   80

Phe Ser Pro Val Leu Phe Ile Glu Asn Pro Arg His Tyr Ala Asn Ala
                85   90   95

Thr Val Thr Thr Leu Gly Asp Trp Xaa
                100   105

<210> 480
<211> 32
<212> PRT
<213> Homo sapiens

<400> 480
Met Val Phe Leu Lys Tyr Arg Phe Leu Phe Phe Leu Val Phe Leu Ala
1   5   10   15

Asn Cys Ile Tyr Ser Leu His Tyr Lys Pro Ser Leu Met Tyr Pro Lys
                20   25   30

<210> 481
<211> 571
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (556)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (571)
<223> Xaa equals stop translation

<400> 481
Met Ala Leu Ser Arg Gly Leu Pro Arg Glu Leu Ala Glu Ala Val Ala
1   5   10   15

```
Gly Gly Arg Val Leu Val Val Gly Ala Gly Gly Ile Gly Cys Glu Leu
            20                  25                  30

Leu Lys Asn Leu Val Leu Thr Gly Phe Ser His Ile Asp Leu Ile Asp
        35                  40                  45

Leu Asp Thr Ile Asp Val Ser Asn Leu Asn Arg Gln Phe Leu Phe Gln
    50                  55                  60

Lys Lys His Val Gly Arg Ser Lys Ala Gln Val Ala Lys Glu Ser Val
65                  70                  75                  80

Leu Gln Phe Tyr Pro Lys Ala Asn Ile Val Ala Tyr His Asp Ser Ile
            85                  90                  95

Met Asn Pro Asp Tyr Asn Val Glu Phe Phe Arg Gln Phe Ile Leu Val
            100                 105                 110

Met Asn Ala Leu Asp Asn Arg Ala Ala Arg Asn His Val Asn Arg Met
        115                 120                 125

Cys Leu Ala Ala Asp Val Pro Leu Ile Glu Ser Gly Thr Ala Gly Tyr
    130                 135                 140

Leu Gly Gln Val Thr Thr Ile Lys Lys Gly Val Thr Glu Cys Tyr Glu
145                 150                 155                 160

Cys His Pro Lys Pro Thr Gln Arg Thr Phe Pro Gly Cys Thr Ile Arg
            165                 170                 175

Asn Thr Pro Ser Glu Pro Ile His Cys Ile Val Trp Ala Lys Tyr Leu
            180                 185                 190

Phe Asn Gln Leu Phe Gly Glu Glu Asp Ala Asp Gln Glu Val Ser Pro
        195                 200                 205

Asp Arg Ala Asp Pro Glu Ala Ala Trp Glu Pro Thr Glu Ala Glu Ala
    210                 215                 220

Arg Ala Arg Ala Ser Asn Glu Asp Gly Asp Ile Lys Arg Ile Ser Thr
225                 230                 235                 240

Lys Glu Trp Ala Lys Ser Thr Gly Tyr Asp Pro Val Lys Leu Phe Thr
            245                 250                 255

Lys Leu Phe Lys Asp Asp Ile Arg Tyr Leu Leu Thr Met Asp Lys Leu
            260                 265                 270

Trp Arg Lys Arg Lys Pro Pro Val Pro Leu Asp Trp Ala Glu Val Gln
        275                 280                 285

Ser Gln Gly Glu Glu Thr Asn Ala Ser Asp Gln Gln Asn Glu Pro Gln
    290                 295                 300

Leu Gly Leu Lys Asp Gln Gln Val Leu Asp Val Lys Ser Tyr Ala Arg
305                 310                 315                 320
```

```
Leu Phe Ser Lys Ser Ile Glu Thr Leu Arg Val His Leu Ala Glu Lys
            325                 330                 335

Gly Asp Gly Ala Glu Leu Ile Trp Asp Lys Asp Asp Pro Ser Ala Met
            340                 345                 350

Asp Phe Val Thr Ser Ala Ala Asn Leu Arg Met His Ile Phe Ser Met
            355                 360                 365

Asn Met Lys Ser Arg Phe Asp Ile Lys Ser Met Ala Gly Asn Ile Ile
        370                 375                 380

Pro Ala Ile Ala Thr Thr Asn Ala Val Ile Ala Gly Leu Ile Val Leu
385                 390                 395                 400

Glu Gly Leu Lys Ile Leu Ser Gly Lys Ile Asp Gln Cys Arg Thr Ile
            405                 410                 415

Phe Leu Asn Lys Gln Pro Asn Pro Arg Lys Lys Leu Leu Val Pro Cys
            420                 425                 430

Ala Leu Asp Pro Pro Asn Pro Asn Cys Tyr Val Cys Ala Ser Lys Pro
            435                 440                 445

Glu Val Thr Val Arg Leu Asn Ala Val His Lys Val Thr Val Leu Thr Leu
        450                 455                 460

Gln Asp Lys Ile Val Lys Glu Lys Phe Ala Met Val Ala Pro Asp Val
465                 470                 475                 480

Gln Ile Glu Asp Gly Lys Gly Thr Ile Leu Ile Ser Ser Glu Glu Gly
            485                 490                 495

Glu Thr Glu Ala Asn Asn His Lys Lys Leu Ser Glu Phe Gly Ile Arg
        500                 505                 510

Asn Gly Ser Arg Leu Gln Ala Asp Asp Phe Leu Gln Asp Tyr Thr Leu
        515                 520                 525

Leu Ile Asn Ile Leu His Ser Glu Asp Leu Gly Lys Asp Val Glu Phe
530                 535                 540

Glu Val Val Gly Asp Ala Pro Glu Lys Val Gly Xaa Lys Gln Ala Glu
545                 550                 555                 560

Asp Ala Ala Lys Ser Ile Thr Asn Gly Gln Xaa
            565                 570
```

<210> 482
<211> 312
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (312)
<223> Xaa equals stop translation

```
<400> 482
Met Gln Val Val Thr Cys Leu Thr Arg Asp Ser Tyr Leu Thr His Cys
 1               5                   10                  15

Phe Leu Gln His Leu Met Val Val Leu Ser Ser Leu Glu Arg Thr Pro
            20                  25                  30

Ser Pro Glu Pro Val Asp Lys Asp Phe Tyr Ser Glu Phe Gly Asn Lys
            35                  40                  45

Thr Thr Gly Lys Met Glu Asn Tyr Glu Leu Ile His Ser Ser Arg Val
    50                  55                  60

Lys Phe Thr Tyr Pro Ser Glu Glu Ile Gly Asp Leu Thr Phe Thr
65                  70                  75                  80

Val Ala Gln Lys Met Ala Glu Pro Glu Lys Ala Pro Ala Leu Ser Ile
                85                  90                  95

Leu Leu Tyr Val Gln Ala Phe Gln Val Gly Met Pro Pro Pro Gly Cys
            100                 105                 110

Cys Arg Gly Pro Leu Arg Pro Lys Thr Leu Leu Leu Thr Ser Ser Glu
            115                 120                 125

Ile Phe Leu Leu Asp Glu Asp Cys Val His Tyr Pro Leu Pro Glu Phe
    130                 135                 140

Ala Lys Glu Pro Pro Gln Arg Asp Arg Tyr Arg Leu Asp Asp Gly Arg
145                 150                 155                 160

Arg Val Arg Asp Leu Asp Arg Val Leu Met Gly Tyr Gln Thr Tyr Pro
            165                 170                 175

Gln Pro Ser Pro Ser Ser Ser Met Thr Cys Lys Val Met Thr Ser Trp
            180                 185                 190

Ala Val Ser Pro Trp Thr Thr Leu Gly Arg Cys Gln Val Ala Arg Leu
            195                 200                 205

Glu Pro Ala Arg Ala Val Lys Ser Ser Gly Arg Cys Leu Ser Pro Val
    210                 215                 220

Leu Arg Ala Glu Arg Ser Ser Arg Cys Trp Leu Ala Ser Gly Arg
225                 230                 235                 240

Pro Cys Val Ala Val Ser Cys Leu Ser Ser Pro Ala Ser Pro Gly
                245                 250                 255

His Ser Gln Pro Val Val Ser Ser Leu Thr Pro Thr Gly Ala Gly Gln
            260                 265                 270

Gln Ala Phe Val Phe Ser Lys Asn Val Leu Ser Ser Leu Trp Tyr Leu
        275                 280                 285

Asn Leu Thr Val Leu Ala Glu Asn Val Asn Met Cys Val Cys Cys Val
    290                 295                 300
```

```
Asn Ser Phe Ser Cys Trp Glu Xaa
305                 310
```

```
<210> 483
<211> 329
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (329)
<223> Xaa equals stop translation

<400> 483
Met Ala Gln His His Leu Trp Ile Leu Leu Leu Cys Leu Gln Thr Trp
 1               5                   10                  15

Pro Glu Ala Ala Gly Lys Asp Ser Glu Ile Phe Thr Val Asn Gly Ile
            20                  25                  30

Leu Gly Glu Ser Val Thr Phe Pro Val Asn Ile Gln Glu Pro Arg Gln
        35                  40                  45

Val Lys Ile Ile Ala Trp Thr Ser Lys Thr Ser Val Ala Tyr Val Thr
    50                  55                  60

Pro Gly Asp Ser Glu Thr Ala Pro Val Val Thr Val Thr His Arg Asn
65                  70                  75                  80

Tyr Tyr Glu Arg Ile His Ala Leu Gly Pro Asn Tyr Asn Leu Val Ile
            85                  90                  95

Ser Asp Leu Arg Met Glu Asp Ala Gly Asp Tyr Lys Ala Asp Ile Asn
        100                 105                 110

Thr Gln Ala Asp Pro Tyr Thr Thr Thr Lys Arg Tyr Asn Leu Gln Ile
        115                 120                 125

Tyr Arg Arg Leu Gly Lys Pro Lys Ile Thr Gln Ser Leu Met Ala Ser
        130                 135                 140

Val Asn Ser Thr Cys Asn Val Thr Leu Thr Cys Ser Val Glu Lys Glu
145                 150                 155                 160

Glu Lys Asn Val Thr Tyr Asn Trp Ser Pro Leu Gly Glu Glu Gly Asn
            165                 170                 175

Val Leu Gln Ile Phe Gln Thr Pro Glu Asp Gln Glu Leu Thr Tyr Thr
            180                 185                 190

Cys Thr Ala Gln Asn Pro Val Ser Asn Asn Ser Asp Ser Ile Ser Ala
        195                 200                 205

Arg Gln Leu Cys Ala Asp Ile Ala Met Gly Phe Arg Thr His His Thr
        210                 215                 220
```

```
Gly Leu Leu Ser Val Leu Ala Met Phe Phe Leu Leu Val Leu Ile Leu
225                 230                 235                     240

Ser Ser Val Phe Leu Phe Arg Leu Phe Lys Arg Arg Gln Asp Ala Ala
                245                 250                 255

Ser Lys Lys Thr Ile Tyr Thr Tyr Ile Met Ala Ser Arg Asn Thr Gln
            260                 265                 270

Pro Ala Glu Ser Arg Ile Tyr Asp Glu Ile Leu Gln Ser Lys Val Leu
        275                 280                 285

Pro Ser Lys Glu Glu Pro Val Asn Thr Val Tyr Ser Glu Val Gln Phe
    290                 295                 300

Ala Asp Lys Met Gly Lys Ala Ser Thr Gln Asp Ser Lys Pro Pro Gly
305                 310                 315                     320

Thr Ser Ser Tyr Glu Ile Val Ile Xaa
                325
```

<210> 484
<211> 178
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (178)
<223> Xaa equals stop translation

<400> 484
```
Met Lys Leu Gln Cys Val Ser Leu Trp Leu Leu Gly Thr Ile Leu Ile
1               5                   10                  15

Leu Cys Ser Val Asp Asn His Gly Leu Arg Arg Cys Leu Ile Ser Thr
                20                  25                  30

Asp Met His His Ile Glu Glu Ser Phe Gln Glu Ile Lys Arg Ala Ile
            35                  40                  45

Gln Ala Lys Asp Thr Phe Pro Asn Val Thr Ile Leu Ser Thr Leu Glu
        50                  55                  60

Thr Leu Gln Ile Ile Lys Pro Leu Asp Val Cys Cys Val Thr Lys Asn
65                  70                  75                      80

Leu Leu Ala Phe Tyr Val Asp Arg Val Phe Lys Asp His Gln Glu Pro
                85                  90                  95

Asn Pro Lys Ile Leu Arg Lys Ile Ser Ser Ile Ala Asn Ser Phe Leu
            100                 105                 110

Tyr Met Gln Lys Thr Leu Arg Gln Cys Gln Glu Gln Arg Gln Cys His
        115                 120                 125

Cys Arg Gln Glu Ala Thr Asn Ala Thr Arg Val Ile His Asp Asn Tyr
```

```
      130                   135                   140
Asp Gln Leu Glu Val His Ala Ala Ala Ile Lys Ser Leu Gly Glu Leu
145                   150                   155                   160

Asp Val Phe Leu Ala Trp Ile Asn Lys Asn His Glu Val Met Ser Ser
                  165                   170                   175

Ala Xaa
```

```
<210> 485
<211> 238
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 485
Met Gly Arg Pro Leu Leu Leu Pro Leu Leu Xaa Leu Leu Xaa Pro Pro
  1               5                   10                  15

Ala Phe Leu Gln Pro Xaa Gly Ser Thr Gly Ser Gly Pro Ser Tyr Leu
              20                  25                  30

Tyr Gly Val Thr Gln Pro Lys His Leu Ser Ala Ser Met Gly Gly Ser
          35                  40                  45

Val Glu Ile Pro Phe Ser Phe Tyr Tyr Pro Trp Glu Leu Ala Xaa Xaa
```

```
        50                    55                        60
    Pro Xaa Val Arg Ile Ser Trp Arg Arg Gly His Phe His Gly Gln Ser
     65                    70                  75                  80

    Phe Tyr Ser Thr Arg Pro Pro Ser Ile His Lys Asp Tyr Val Asn Arg
                        85                  90                  95

    Leu Phe Leu Asn Trp Thr Glu Gly Gln Glu Ser Gly Phe Leu Arg Ile
                    100                 105                 110

    Ser Asn Leu Arg Lys Glu Asp Gln Ser Val Tyr Phe Cys Arg Val Glu
                115                 120                 125

    Leu Asp Thr Arg Arg Ser Gly Arg Gln Gln Leu Gln Ser Ile Lys Gly
            130                 135                 140

    Thr Lys Leu Thr Ile Thr Gln Ala Val Thr Thr Thr Thr Thr Trp Arg
    145                 150                 155                 160

    Pro Ser Ser Thr Thr Thr Ile Ala Gly Leu Arg Val Thr Glu Ser Lys
                    165                 170                 175

    Gly His Ser Glu Ser Trp His Leu Ser Leu Asp Thr Ala Ile Arg Val
                    180                 185                 190

    Ala Leu Ala Val Ala Val Leu Lys Thr Val Ile Leu Gly Leu Leu Cys
                195                 200                 205

    Leu Leu Leu Cys Gly Gly Gly Glu Gly Lys Val Ala Gly Arg Gln Ala
            210                 215                 220

    Val Thr Ser Asp Gln Gln Ser Val Gly Arg Arg Asp Val Tyr
    225                 230                 235
```

<210> 486
<211> 62
<212> PRT
<213> Homo sapiens

<400> 486
```
Met Gln Lys Lys Asn Ser Leu Phe Phe Phe Phe Ala Phe Tyr Tyr Glu
  1                 5                  10                  15

Asn Lys Thr Asn Ala Pro Gly Glu Gly Ser Met Ile Thr Arg Asn Ile
                20                  25                  30

Lys Glu Tyr Phe Leu Pro Phe Leu Phe Cys Cys Val Glu Ala Ser Ile
            35                  40                  45

Ala Ile Asn Lys Leu Asn Tyr Leu Trp Thr His Phe Gln
        50                  55                  60
```

<210> 487
<211> 27
<212> PRT

<213> Homo sapiens

<400> 487
Met Pro Gly Leu Ser Leu Ile Leu Thr Val Thr Leu Leu Ala Val Ser
  1   5   10   15

Asp Ser Ala Ala Thr Cys Ile Val Ala Lys Gly
            20   25

<210> 488
<211> 339
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (330)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (335)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (336)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (339)
<223> Xaa equals stop translation

<400> 488
Met Ser Gly Pro Asp Val Glu Thr Pro Ser Ala Ile Gln Ile Cys Arg
  1   5   10   15

Ile Met Arg Pro Asp Asp Ala Asn Val Ala Gly Asn Val His Gly Gly
            20   25   30

Thr Ile Leu Lys Met Ile Glu Glu Ala Gly Ala Ile Ile Ser Thr Arg
           35   40   45

His Cys Asn Ser Gln Asn Gly Glu Arg Cys Val Ala Ala Leu Ala Arg
        50   55   60

Val Glu Arg Thr Asp Phe Leu Ser Pro Met Cys Ile Gly Glu Val Ala
 65   70   75   80

His Val Ser Ala Glu Ile Thr Tyr Thr Ser Lys His Ser Val Glu Val
                85   90   95

```
Gln Val Asn Val Met Ser Glu Asn Ile Leu Thr Gly Ala Lys Lys Leu
            100                 105                 110

Thr Asn Lys Ala Thr Leu Trp Tyr Val Pro Leu Ser Leu Lys Asn Val
        115                 120                 125

Asp Lys Val Leu Glu Val Pro Pro Val Val Tyr Ser Arg Xaa Glu Gln
    130                 135                 140

Glu Glu Glu Gly Arg Lys Arg Tyr Glu Ala Gln Lys Leu Glu Arg Met
145                 150                 155                 160

Glu Thr Lys Trp Arg Asn Gly Asp Ile Val Gln Pro Val Leu Asn Pro
            165                 170                 175

Glu Pro Asn Thr Val Ser Tyr Ser Gln Ser Ser Leu Ile His Leu Val
            180                 185                 190

Gly Pro Ser Asp Cys Thr Leu His Gly Phe Val His Gly Gly Val Thr
        195                 200                 205

Met Lys Leu Met Asp Glu Val Ala Gly Ile Val Ala Ala Arg His Cys
    210                 215                 220

Lys Thr Asn Ile Val Thr Ala Ser Val Asp Ala Ile Asn Phe His Asp
225                 230                 235                 240

Lys Ile Arg Lys Gly Cys Val Ile Thr Ile Ser Gly Arg Met Thr Phe
            245                 250                 255

Thr Ser Asn Lys Ser Met Glu Ile Glu Val Leu Val Asp Ala Asp Pro
            260                 265                 270

Val Val Asp Ser Ser Gln Lys Arg Tyr Arg Ala Ala Ser Ala Phe Phe
        275                 280                 285

Thr Tyr Val Ser Leu Ser Gln Glu Gly Arg Ser Leu Pro Val Pro Gln
    290                 295                 300

Leu Val Pro Glu Thr Glu Asp Glu Lys Lys Arg Phe Glu Glu Gly Lys
305                 310                 315                 320

Gly Arg Tyr Leu Gln Met Lys Ala Lys Xaa Gln Gly His Ala Xaa Xaa
            325                 330                 335

Gln Pro Xaa
```

```
<210> 489
<211> 32
<212> PRT
<213> Homo sapiens

<400> 489
Met Leu Asn Ser Asn Ile Asn Asp Leu Leu Met Val Thr Tyr Leu Ala
  1               5                  10                  15
```

Asn Leu Thr Gln Ser Gln Ile Ala Leu Asn Glu Lys Leu Val Asn Leu
            20   25   30

<210> 490
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

<400> 490
Met Arg Glu Thr Ser Ile Arg Val Leu Leu Met Leu Pro Ala Leu Glu
 1   5   10   15

Ser Thr Ser Gly Leu Ser Ala Phe Met Gly Leu Gly Thr Arg Ile Gly
            20   25   30

Cys Phe Lys Thr Ile Thr Cys Trp Pro Thr Ser Leu Thr Gln Arg Xaa
         35   40   45

<210> 491
<211> 38
<212> PRT
<213> Homo sapiens

<400> 491
Met Tyr Met Tyr Ser Leu Asn Val Phe Leu Ser Phe Ile Phe Leu Ala
 1   5   10   15

Leu Val Phe Lys Cys Val His Val Cys Gln Gly Ala Asn Ala Phe Leu
            20   25   30

Phe Leu Lys Leu Val Phe
         35

<210> 492
<211> 61
<212> PRT
<213> Homo sapiens

<400> 492
Met Gly Leu Arg Leu Ile Cys Leu Glu Leu Thr Met Val Lys Ala Leu
 1   5   10   15

Val Cys Glu Met Phe Leu Phe Phe Leu Met Thr Gln Lys Leu Ile Trp

```
              20                 25                 30
Gln Glu Cys Thr Glu Lys Phe Ala Lys Leu Leu Val Gln Leu Ile Ser
          35                 40                 45

Leu Val Phe Ala Trp Glu Phe Phe Ser Glu Asp Thr Pro
      50                 55                 60
```

<210> 493
<211> 346
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (346)
<223> Xaa equals stop translation

<400> 493

```
Met Leu Ala Ala Arg Leu Val Cys Leu Arg Thr Leu Pro Ser Arg Val
1               5                 10                 15

Phe His Pro Ala Phe Thr Lys Ala Ser Pro Val Val Lys Asn Ser Ile
            20                 25                 30

Thr Lys Asn Gln Trp Leu Leu Thr Pro Ser Arg Glu Tyr Ala Thr Lys
        35                 40                 45

Thr Arg Ile Gly Ile Arg Arg Gly Arg Thr Gly Gln Glu Leu Lys Glu
    50                 55                 60

Ala Ala Leu Glu Pro Ser Met Glu Lys Ile Phe Lys Ile Asp Gln Met
65                 70                 75                 80

Gly Arg Trp Phe Val Ala Gly Gly Ala Ala Val Gly Leu Gly Ala Leu
            85                 90                 95

Cys Tyr Tyr Gly Leu Gly Leu Ser Asn Glu Ile Gly Ala Ile Glu Lys
            100                105                110

Ala Val Ile Trp Pro Gln Tyr Val Lys Asp Arg Ile His Ser Thr Tyr
        115                120                125

Met Tyr Leu Ala Gly Ser Ile Gly Leu Thr Ala Leu Ser Ala Ile Ala
    130                135                140

Ile Ser Arg Thr Pro Val Leu Met Asn Phe Met Met Arg Gly Ser Trp
145                150                155                160

Val Thr Ile Gly Val Thr Phe Ala Ala Met Val Gly Ala Gly Met Leu
            165                170                175

Val Arg Ser Ile Pro Tyr Asp Gln Ser Pro Gly Pro Lys His Leu Ala
        180                185                190

Trp Leu Leu His Ser Gly Val Met Gly Ala Val Val Ala Pro Leu Thr
        195                200                205
```

```
Ile Leu Gly Gly Pro Leu Leu Ile Arg Ala Ala Trp Tyr Thr Ala Gly
    210                 215                 220

Ile Val Gly Gly Leu Ser Thr Val Ala Met Cys Ala Pro Ser Glu Lys
225                 230                 235                 240

Phe Leu Asn Met Gly Ala Pro Leu Gly Val Gly Leu Gly Leu Val Phe
                245                 250                 255

Val Ser Ser Leu Gly Ser Met Phe Leu Pro Pro Thr Thr Val Ala Gly
                260                 265                 270

Ala Thr Leu Tyr Ser Val Ala Met Tyr Gly Gly Leu Val Leu Phe Ser
            275                 280                 285

Met Phe Leu Leu Tyr Asp Thr Gln Lys Val Ile Lys Arg Ala Glu Val
    290                 295                 300

Ser Pro Met Tyr Gly Val Gln Lys Tyr Asp Pro Ile Asn Ser Met Leu
305                 310                 315                 320

Ser Ile Tyr Met Asp Thr Leu Asn Ile Phe Met Arg Val Ala Thr Met
                325                 330                 335

Leu Ala Thr Gly Gly Asn Arg Lys Lys Xaa
            340                 345


<210> 494
<211> 237
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (237)
<223> Xaa equals stop translation

<400> 494
Met Glu Glu Val Leu Leu Leu Gly Leu Lys Asp Arg Glu Gly Tyr Thr
  1                 5                  10                  15

Ser Phe Trp Asn Asp Cys Ile Ser Ser Gly Leu Arg Gly Cys Met Leu
                20                  25                  30

Ile Glu Leu Ala Leu Arg Gly Arg Leu Gln Leu Glu Ala Cys Gly Met
            35                  40                  45

Arg Arg Lys Ser Leu Leu Thr Arg Lys Val Ile Cys Lys Ser Asp Ala
        50                  55                  60

Pro Thr Gly Asp Val Leu Leu Asp Glu Ala Leu Lys His Val Lys Glu
65                  70                  75                  80

Thr Gln Pro Pro Glu Thr Val Gln Asn Trp Ile Glu Leu Leu Ser Gly
                85                  90                  95
```

```
Glu Thr Trp Asn Pro Leu Lys Leu His Tyr Gln Leu Arg Asn Val Arg
            100                 105                 110

Glu Arg Leu Ala Lys Asn Leu Val Glu Lys Gly Val Leu Thr Thr Glu
        115                 120                 125

Lys Gln Asn Phe Leu Leu Phe Asp Met Thr Thr His Pro Leu Thr Asn
    130                 135                 140

Asn Asn Ile Lys Gln Arg Leu Ile Lys Lys Val Gln Glu Ala Val Leu
145                 150                 155                 160

Asp Lys Trp Val Asn Asp Pro His Arg Met Asp Arg Arg Leu Leu Ala
                165                 170                 175

Leu Ile Tyr Leu Ala His Ala Ser Asp Val Leu Glu Asn Ala Phe Ala
            180                 185                 190

Pro Leu Leu Asp Glu Gln Tyr Asp Leu Ala Thr Lys Arg Val Arg Gln
        195                 200                 205

Leu Leu Asp Leu Asp Pro Glu Val Glu Cys Leu Lys Ala Asn Thr Asn
    210                 215                 220

Glu Val Leu Trp Ala Val Val Ala Ala Phe Thr Lys Xaa
225                 230                 235


<210> 495
<211> 200
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (200)
<223> Xaa equals stop translation

<400> 495
Met Ala Gln Arg Met Val Trp Val Asp Leu Glu Met Thr Gly Leu Asp
  1                 5                   10                  15

Ile Glu Lys Asp Gln Ile Ile Glu Met Ala Cys Leu Ile Thr Asp Ser
            20                  25                  30

Asp Leu Asn Ile Leu Ala Glu Gly Pro Asn Leu Ile Ile Lys Gln Pro
            35                  40                  45

Asp Glu Leu Leu Asp Ser Met Ser Asp Trp Cys Lys Glu His His Gly
        50                  55                  60

Lys Ser Gly Leu Thr Lys Ala Val Lys Glu Ser Thr Ile Thr Leu Gln
  65                  70                  75                  80

Gln Ala Glu Tyr Glu Phe Leu Ser Phe Val Arg Gln Gln Thr Pro Pro
                85                  90                  95

Gly Leu Cys Pro Leu Ala Gly Asn Ser Val His Glu Asp Lys Lys Phe
```

```
                100                 105                 110

Leu Asp Lys Tyr Met Pro Gln Phe Met Lys His Leu His Tyr Arg Ile
        115                 120                 125

Ile Asp Val Ser Thr Val Lys Glu Leu Cys Arg Arg Trp Tyr Pro Glu
    130                 135                 140

Glu Tyr Glu Phe Ala Pro Lys Lys Ala Ala Ser His Arg Ala Leu Asp
145                 150                 155                 160

Asp Ile Ser Glu Ser Ile Lys Glu Leu Gln Phe Tyr Arg Asn Asn Ile
                165                 170                 175

Phe Lys Lys Lys Ile Asp Glu Lys Lys Arg Lys Ile Ile Glu Asn Gly
            180                 185                 190

Glu Asn Glu Lys Thr Val Ser Xaa
        195                 200
```

<210> 496
<211> 351
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (351)
<223> Xaa equals stop translation

<400> 496

```
Met Ala Thr Thr Ala Ala Pro Ala Gly Gly Ala Arg Asn Gly Ala Gly
  1                 5                  10                  15

Pro Glu Trp Gly Gly Phe Glu Glu Asn Ile Gln Gly Gly Gly Ser Ala
                20                  25                  30

Val Ile Asp Met Glu Asn Met Asp Asp Thr Ser Gly Ser Ser Phe Glu
        35                  40                  45

Asp Met Gly Glu Leu His Gln Arg Leu Arg Glu Glu Glu Val Asp Ala
    50                  55                  60

Asp Ala Ala Asp Ala Ala Ala Ala Glu Glu Glu Asp Gly Glu Phe Leu
 65                  70                  75                  80

Gly Met Lys Gly Phe Lys Gly Gln Leu Ser Arg Gln Val Ala Asp Gln
                85                  90                  95

Met Trp Gln Ala Gly Lys Arg Gln Ala Ser Arg Ala Phe Ser Leu Tyr
                100                 105                 110

Ala Asn Ile Asp Ile Leu Arg Pro Tyr Phe Asp Val Glu Pro Ala Gln
        115                 120                 125

Val Arg Thr Gly Leu Leu Glu Ser Met Ile Pro Ile Lys Met Val Asn
    130                 135                 140
```

```
Phe Pro Gln Lys Ile Ala Gly Glu Leu Tyr Gly Pro Leu Met Leu Val
145                 150                 155                 160

Phe Thr Leu Val Ala Ile Leu Leu His Gly Met Lys Thr Ser Asp Thr
                165                 170                 175

Ile Ile Arg Glu Gly Thr Leu Met Gly Thr Ala Ile Gly Thr Cys Phe
            180                 185                 190

Gly Tyr Trp Leu Gly Val Ser Ser Phe Ile Tyr Phe Leu Ala Tyr Leu
            195                 200                 205

Cys Asn Ala Gln Ile Thr Met Leu Gln Met Leu Ala Leu Leu Gly Tyr
    210                 215                 220

Gly Leu Phe Gly His Cys Ile Val Leu Phe Ile Thr Tyr Asn Ile His
225                 230                 235                 240

Leu His Ala Leu Phe Tyr Leu Phe Trp Leu Val Gly Gly Leu Ser
                245                 250                 255

Thr Leu Arg Met Val Ala Val Leu Val Ser Arg Thr Val Gly Pro Thr
            260                 265                 270

Gln Arg Leu Leu Leu Cys Gly Thr Leu Ala Ala Leu His Met Leu Phe
            275                 280                 285

Leu Leu Tyr Leu His Phe Ala Tyr His Lys Val Val Glu Gly Ile Leu
    290                 295                 300

Asp Thr Leu Glu Gly Pro Asn Ile Pro Pro Ile Gln Arg Val Pro Arg
305                 310                 315                 320

Asp Ile Pro Ala Met Leu Pro Ala Ala Arg Leu Pro Thr Thr Val Leu
                325                 330                 335

Asn Ala Thr Ala Lys Ala Val Ala Val Thr Leu Gln Ser His Xaa
            340                 345                 350


<210> 497
<211> 265
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (265)
<223> Xaa equals stop translation

<400> 497
Met Arg Gly Ser Arg Gly Gly Trp Ala Gly Glu Met Ala Ala Ser Gly
  1                 5                  10                  15

Glu Ser Gly Thr Ser Gly Gly Gly Ser Thr Glu Glu Ala Phe Met
            20                  25                  30
```

```
Thr Phe Tyr Ser Glu Val Lys Gln Ile Glu Lys Arg Asp Ser Val Leu
        35                  40                  45

Thr Ser Lys Asn Gln Ile Glu Arg Leu Thr Arg Pro Gly Ser Ser Tyr
    50                  55                  60

Phe Asn Leu Asn Pro Phe Glu Val Leu Gln Ile Asp Pro Glu Val Thr
 65              70                  75                      80

Asp Glu Glu Ile Lys Lys Arg Phe Arg Gln Leu Ser Ile Leu Val His
                85                  90                  95

Pro Asp Lys Asn Gln Asp Asp Ala Asp Arg Ala Gln Lys Ala Phe Glu
            100                 105                 110

Ala Val Asp Lys Ala Tyr Lys Leu Leu Asp Gln Glu Gln Lys Lys
        115                 120                 125

Arg Ala Leu Asp Val Ile Gln Ala Gly Lys Glu Tyr Val Glu His Thr
        130                 135                 140

Val Lys Glu Arg Lys Lys Gln Leu Lys Lys Glu Gly Lys Pro Thr Ile
145                 150                 155                 160

Val Glu Glu Asp Asp Pro Glu Leu Phe Lys Gln Ala Val Tyr Lys Gln
            165                 170                 175

Thr Met Lys Leu Phe Ala Glu Leu Glu Ile Lys Arg Lys Glu Arg Glu
        180                 185                 190

Ala Lys Glu Met His Glu Arg Lys Arg Gln Arg Glu Glu Glu Ile Glu
        195                 200                 205

Ala Gln Glu Lys Ala Lys Arg Glu Arg Glu Trp Gln Lys Asn Phe Glu
    210                 215                 220

Glu Ser Arg Asp Gly Arg Val Asp Ser Trp Arg Asn Phe Gln Ala Asn
225                 230                 235                 240

Thr Lys Gly Lys Lys Glu Lys Lys Asn Arg Thr Phe Leu Arg Pro Pro
                245                 250                 255

Lys Val Lys Met Glu Gln Arg Glu Xaa
            260                 265


<210> 498
<211> 25
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 498
Asp Ser Met Pro Thr Cys Pro Leu Xaa Ala Ser Leu Glu Cys Gly Pro
```

```
 1                5                    10                      15

Leu Leu Pro Val Arg Leu Cys Cys Leu
            20                25
```

```
<210> 499
<211> 159
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (159)
<223> Xaa equals stop translation

<400> 499
Met Asn Glu Tyr Arg Val Pro Glu Leu Asn Val Gln Asn Gly Val Leu
 1               5                   10                      15

Lys Ser Leu Ser Phe Leu Phe Glu Tyr Ile Gly Glu Met Gly Lys Asp
            20                  25                  30

Tyr Ile Tyr Ala Val Thr Pro Leu Leu Glu Asp Ala Leu Met Asp Arg
            35                  40                  45

Asp Leu Val His Arg Gln Thr Ala Ser Ala Val Val Gln His Met Ser
      50                  55                  60

Leu Gly Val Tyr Gly Phe Gly Cys Glu Asp Ser Leu Asn His Leu Leu
   65                  70                  75                  80

Asn Tyr Val Trp Pro Asn Val Phe Glu Thr Ser Pro His Val Ile Gln
                85                  90                  95

Ala Val Met Gly Ala Leu Glu Gly Leu Arg Val Ala Ile Gly Pro Cys
            100                 105                 110

Arg Met Leu Gln Tyr Cys Leu Gln Gly Leu Phe His Pro Ala Arg Lys
            115                 120                 125

Val Arg Asp Val Tyr Trp Lys Ile Tyr Asn Ser Ile Tyr Ile Gly Ser
      130                 135                 140

Gln Asp Ala Leu Ile Ala His Tyr Pro Arg Ile Tyr Gln Arg Xaa
145                 150                 155
```

```
<210> 500
<211> 279
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (238)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (279)
<223> Xaa equals stop translation

<400> 500
Met Ile Ser Asp Asn Ser Ala Glu Asn Ile Ala Leu Val Thr Ser Met
  1               5                  10                  15

Tyr Asp Gly Leu Leu Gln Ala Gly Ala Arg Leu Cys Pro Thr Val Gln
            20                  25                  30

Leu Glu Asp Ile Arg Asn Leu Gln Asp Leu Thr Pro Leu Lys Leu Ala
        35                  40                  45

Ala Lys Glu Gly Lys Ile Glu Ile Phe Arg His Ile Leu Gln Arg Glu
    50                  55                  60

Phe Ser Gly Leu Ser His Leu Ser Arg Lys Phe Thr Glu Trp Cys Tyr
 65                  70                  75                  80

Gly Pro Val Arg Val Ser Leu Tyr Asp Leu Ala Ser Val Asp Ser Cys
                85                  90                  95

Glu Glu Asn Ser Val Leu Glu Ile Ile Ala Phe His Cys Lys Ser Pro
            100                 105                 110

His Arg His Arg Met Val Val Leu Glu Pro Leu Asn Lys Leu Leu Gln
        115                 120                 125

Ala Lys Trp Asp Leu Leu Ile Pro Lys Phe Phe Leu Asn Phe Leu Cys
    130                 135                 140

Asn Leu Ile Tyr Met Phe Ile Phe Thr Ala Val Ala Tyr His Gln Pro
145                 150                 155                 160

Thr Leu Lys Lys Gln Ala Ala Pro His Leu Lys Ala Glu Val Gly Asn
                165                 170                 175

Ser Met Leu Leu Thr Gly His Ile Leu Ile Leu Leu Gly Gly Ile Tyr
            180                 185                 190

Leu Leu Val Gly Gln Leu Trp Tyr Phe Trp Arg Arg His Val Phe Ile
        195                 200                 205

Trp Ile Ser Phe Ile Asp Ser Tyr Phe Glu Ile Leu Phe Leu Phe Gln
   210                 215                 220

Ala Leu Leu Thr Val Val Ser Gln Val Leu Cys Phe Leu Xaa Ile Glu
225                 230                 235                 240

Trp Tyr Leu Pro Leu Leu Val Ser Ala Leu Val Leu Gly Trp Leu Asn
                245                 250                 255

Leu Leu Tyr Tyr Thr Arg Gly Phe Gln His Thr Gly Ile Tyr Ser Val
            260                 265                 270

Met Ile Gln Lys Pro Trp Xaa
```

275

```
<210> 501
<211> 193
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 501
Met Ile Arg Cys Gly Leu Ala Cys Glu Arg Cys Arg Trp Ile Leu Pro
 1               5                   10                  15

Leu Leu Leu Leu Ser Ala Ile Ala Phe Asp Ile Ile Ala Leu Ala Gly
            20                  25                  30

Arg Gly Trp Leu Gln Ser Ser Asp His Gly Gln Thr Ser Ser Leu Trp
         35                  40                  45

Trp Lys Cys Ser Gln Glu Gly Gly Gly Ser Gly Ser Tyr Glu Glu Gly
     50                  55                  60

Cys Gln Ser Leu Met Glu Tyr Ala Trp Gly Arg Ala Ala Ala Ala Met
 65              70                  75                  80

Leu Phe Cys Gly Phe Ile Ile Leu Val Ile Cys Phe Ile Leu Ser Phe
                85                  90                  95

Phe Ala Leu Cys Gly Pro Gln Met Leu Val Phe Leu Arg Val Ile Gly
            100                 105                 110

Gly Leu Leu Ala Leu Ala Ala Val Phe Gln Ile Ile Ser Leu Val Ile
         115                 120                 125

Tyr Pro Val Lys Tyr Thr Gln Thr Phe Thr Leu His Ala Asn Xaa Ala
     130                 135                 140

Val Thr Tyr Ile Tyr Asn Trp Ala Tyr Gly Phe Gly Trp Ala Ala Thr
145                 150                 155                 160

Ile Ile Leu Ile Gly Cys Ala Phe Phe Cys Cys Leu Pro Asn Tyr
                165                 170                 175

Glu Asp Asp Leu Leu Gly Asn Ala Lys Pro Arg Tyr Phe Tyr Thr Ser
            180                 185                 190

Ala


<210> 502
<211> 205
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (205)
<223> Xaa equals stop translation

<400> 502
Met Ala Ala Gly Asp Gln Val Phe Ser Gly Ala Gly His Val Xaa Glu
  1               5                  10                  15

His Val Ala Gly Gly Arg His Ala Trp Leu Leu Thr Trp Gln Ser Ala
             20                  25                  30

Cys Pro Ala Asn Arg Leu Ser Leu Val Pro Leu Val Pro Ser Ala Ser
         35                  40                  45

Met Thr Arg Leu Met Arg Xaa Arg Thr Ala Ser Gly Ser Ser Val Ile
     50                  55                  60

Leu Trp Met Ala Pro Ala Ala Ala Pro Thr Pro Ala Arg Ala Pro Glu
 65                  70                  75                  80

Ala Ala Pro Thr Pro Ala Arg Ala Pro Ala Ala Ala Arg Thr Pro Ala
             85                  90                  95

Arg Gly Pro Thr Trp Thr Ser Pro Pro Thr Arg Val Leu Leu Gly Thr
            100                 105                 110

Xaa Pro Gly Pro Ser Pro Trp Arg Ser Pro Ala Arg Arg Pro Ala Gln
        115                 120                 125

Leu Pro Pro Pro Asp Ser Asp Leu Cys Ser Gly Pro Leu Leu Pro Gly
    130                 135                 140

Pro Phe Ser Pro Pro Ala Cys His Thr Ala Pro Asn Ser Val Leu Ile
145                 150                 155                 160

Gln Ser Leu Phe Cys Lys Ser Glu Leu Trp Trp Arg Gln Met Arg Ser
            165                 170                 175

Ile Thr Trp Val Pro Ser Pro Lys Ala Gly Trp Arg Trp Thr Lys Gly
            180                 185                 190
```

Arg Lys Gln Ala Ser Pro His Arg Ile Leu Phe His Xaa
          195   200   205

<210> 503
<211> 147
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (147)
<223> Xaa equals stop translation

<400> 503
Met Ala Leu Thr Leu Leu Pro Ser Val Ser Arg Leu Pro Gly Glu Arg
  1   5   10   15

Met Ala Ala Ser Gly Leu Pro Tyr Val Leu His His Lys Ser Ser Leu
              20   25   30

Met Lys Val Ile Phe Phe Pro Tyr Pro Val Leu Pro Leu Pro Ala Pro
          35   40   45

Asn Gly Thr Trp Val Pro Arg Leu Val Leu Gly Leu Gly Ser Gly Asp
      50   55   60

Gln Val His Tyr Leu Pro Ile Ser Ser Ser Ile Val Asn Tyr Gly Thr
  65   70   75   80

Ser Val Ser Gly Lys Ser Trp Val Phe Leu Val Tyr Pro Leu His Pro
              85   90   95

Thr Pro Thr Trp Ser Thr Arg Cys Phe Gln Val Trp Asp Leu Leu Ser
          100   105   110

Val Glu Leu Pro Asp Lys Gly Glu Gly Asn Thr Arg Arg Ala Ser Gly
          115   120   125

Val Pro Gly Leu Ser Gln Leu Pro Thr Ser His Lys Pro Ile Lys Gln
          130   135   140

Glu Tyr Xaa
145

<210> 504
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals stop translation

<400> 504
Met Val Trp Val Leu Trp Ser Ala Pro Ser Leu Ala Pro Pro Trp Val

```
  1                 5                    10                   15
Gly Pro Cys Trp Pro Ser Thr Gly Asn Cys Cys Leu Cys Glu Val Gly
             20                  25                  30

Ala Ala Leu Pro Pro Arg Gly Pro Ser Leu Ser Asp Cys Leu Gly Leu
         35                  40                  45

Pro Pro Trp Thr Pro Trp Gly Pro Ala Trp Thr Leu Ala Gln Ser Xaa
     50                  55                  60
```

<210> 505
<211> 94
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (94)
<223> Xaa equals stop translation

<400> 505
```
Met Ser Thr Gly Ala Leu Asn Thr Ser Pro Pro Ala Ser Asn Arg Leu
 1               5                   10                  15

Glu Ser Thr Leu Asn Glu Tyr Leu Ile Gln Pro Gln Leu His Cys Ser
             20                  25                  30

Ser Val Gln Arg Leu Thr Leu Lys Trp Gly Cys Ser Ser Leu Gln Arg
         35                  40                  45

Asp Gly Gln Ala Val Pro Trp Gly Leu Trp Gln Arg Ala Tyr Pro Ser
     50                  55                  60

Leu Leu Pro Thr Leu Pro Ser Asp Leu Leu Arg Pro His Ala Val Thr
 65              70                  75                  80

Pro Ser Val Ser Val Ser Val His Thr Cys Glu Ser Ser Xaa
                 85                  90
```

<210> 506
<211> 22
<212> PRT
<213> Homo sapiens

<400> 506
```
Met Phe Leu Ile Phe Val Tyr Phe Leu Lys Ile Leu Phe Ser Ser Ser
 1               5                   10                  15

Leu Pro Phe Leu Trp Leu
             20
```

```
<210> 507
<211> 22
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 507
Met Phe Leu Ile Phe Val Tyr Phe Leu Lys Xaa Leu Phe Ser Ser Ser
  1               5                  10                  15

Leu Pro Phe Leu Trp Leu
             20


<210> 508
<211> 33
<212> PRT
<213> Homo sapiens

<400> 508
Arg Gly Gly Leu Cys Pro Leu Leu Val Pro Gly Pro Leu Ala Arg Gln
  1               5                  10                  15

Glu Pro Ser Pro Ser Leu Gln Gly Cys Ser Glu Ser Pro Val Gly Met
             20                  25                  30

Asp


<210> 509
<211> 28
<212> PRT
<213> Homo sapiens

<400> 509
Met Gln Phe Leu Leu Thr Ala Phe Leu Leu Val Pro Leu Leu Ala Leu
  1               5                  10                  15

Cys Asp Val Pro Ile Ser Leu Gly Phe Ser Pro Ser
             20                  25


<210> 510
<211> 15
<212> PRT
<213> Homo sapiens

<400> 510
Pro Gly Lys Pro Gln Ala Cys Pro Glu Leu Thr Ser Val Leu Pro
  1               5                  10                  15


<210> 511
```

```
<211> 27
<212> PRT
<213> Homo sapiens

<400> 511
Met Thr Phe Thr Leu Gly Asp Ser Gln Val Leu Leu Ile Asn Leu Phe
 1               5                   10                  15

Pro Ser Met Pro Ser Gly Ser Cys Ala Arg Pro
            20                  25


<210> 512
<211> 19
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 512
Asn Lys Ser Leu Xaa Ser Cys Leu Phe Val Leu His Phe Val Leu His
 1               5                   10                  15

Cys Xaa Phe


<210> 513
<211> 29
<212> PRT
<213> Homo sapiens

<400> 513
Met Glu Lys Thr His Arg Leu Arg Ile Arg Asn Pro Cys Leu Gln Phe
 1               5                   10                  15

Ser Ile Leu Asn Leu Phe Leu Leu Lys Met Ile Val Ser
            20                  25


<210> 514
<211> 75
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (75)
<223> Xaa equals stop translation
```

<400> 514
Met Val Asp Ile Ser Lys Met His Met Ile Leu Tyr Asp Leu Gln Gln
 1   5   10   15

Asn Leu Ser Ser Ser His Arg Ala Leu Glu Lys Gln Ile Asp Thr Leu
             20   25   30

Ala Gly Lys Leu Asp Ala Leu Thr Glu Leu Leu Ser Thr Ala Leu Gly
             35   40   45

Pro Ser Ser Phe Gln Asn Pro Ala Ser Ser Pro Ser Ser Trp Thr His
     50   55   60

Glu Glu Glu Pro Gly Tyr Phe Pro Gln Tyr Xaa
 65   70   75

<210> 515
<211> 10
<212> PRT
<213> Homo sapiens

<400> 515
Leu Pro Leu Ala Glu Leu Lys Asn Trp Val
 1   5   10

<210> 516
<211> 207
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (207)
<223> Xaa equals stop translation

<400> 516
Met Leu Trp Phe Gly Gly Cys Ser Ala Val Asn Ala Thr Gly His Leu
 1   5   10   15

Ser Asp Thr Leu Trp Leu Ile Pro Ile Thr Phe Leu Thr Ile Gly Tyr
             20   25   30

Gly Asp Val Val Pro Gly Thr Met Trp Gly Lys Ile Val Cys Leu Cys
             35   40   45

Thr Gly Val Met Gly Val Cys Cys Thr Ala Leu Leu Val Ala Val Val
     50   55   60

Ala Arg Lys Leu Glu Phe Asn Lys Ala Glu Lys His Val His Asn Phe
 65   70   75   80

```
Met Met Asp Ile Gln Tyr Thr Lys Glu Met Lys Glu Ser Ala Ala Arg
                85                  90                  95

Val Leu Gln Glu Ala Trp Met Phe Tyr Lys His Thr Arg Arg Lys Glu
                100                 105                 110

Ser His Ala Ala Arg Arg His Gln Arg Xaa Leu Leu Ala Ala Ile Asn
            115                 120                 125

Ala Phe Arg Gln Val Arg Leu Lys His Arg Lys Leu Arg Glu Gln Val
        130                 135                 140

Asn Ser Met Val Asp Ile Ser Lys Met His Met Ile Leu Tyr Asp Leu
145                 150                 155                 160

Gln Gln Asn Leu Ser Ser His Arg Arg Ala Leu Glu Lys Gln Ile Asp
                165                 170                 175

Thr Leu Ala Gly Lys Leu Asp Ala Leu Thr Glu Leu Leu Ser Thr Ala
            180                 185                 190

Leu Gly Pro Arg Gln Leu Pro Glu Pro Ser Gln Gln Ser Lys Xaa
            195                 200                 205
```

<210> 517
<211> 36
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 517
```
Met Trp Arg Cys Arg Gly Lys Leu Ser Phe Pro Leu Phe Ala Val Val
  1               5                   10                  15

Ile Val Ser Cys Arg Lys Asp Gly Pro Asp Ala Ala Ala Ala Pro Ala
                20                  25                  30

Val Xaa Lys Lys
        35
```

<210> 518
<211> 19
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 518
```
Met Ala Leu Val Ala Leu Phe Thr Gln Leu Met Arg Xaa Leu Gly Arg
```

```
   1              5              10             15
```

Cys Pro Gln


```
<210> 519
<211> 32
<212> PRT
<213> Homo sapiens

<400> 519
Met Thr Phe Pro Phe Glu Lys Glu Asn Ser Cys Phe Gln Cys Leu Leu
  1              5              10             15

Phe Asp Ser Trp Arg Glu Gln Thr Arg Thr Asn Ile Gln Pro Gln Arg
              20             25             30
```


```
<210> 520
<211> 28
<212> PRT
<213> Homo sapiens

<400> 520
Met His Leu Leu Asp Phe Phe Arg Asp Leu Val Leu Leu Val Leu Leu
  1              5              10             15

Ala Leu Leu Asp Ser Phe Trp Leu Glu Val Gln Lys
              20             25
```


```
<210> 521
<211> 26
<212> PRT
<213> Homo sapiens

<400> 521
Met Cys Leu Ile His Phe Ile Lys Ile Ile Leu Val Phe Ile Leu Lys
  1              5              10             15

Leu Trp Leu Tyr Ser Gln Lys Cys Pro Lys
              20             25
```


```
<210> 522
<211> 33
<212> PRT
<213> Homo sapiens

<400> 522
Met Ile His Val His Glu Trp Asn Asp Gln Met Leu Met Val Tyr Ile
  1              5              10             15

Phe Leu Tyr Pro Val Ser Ile Thr Phe Leu Asn Leu Cys Ser Leu Thr
```

```
                    20                    25                    30

Cys


<210> 523
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 523
Leu Asn Glu Ser Tyr Val Ser Arg Ala Gly Gly Trp Phe Ser Met Phe
 1               5                   10                  15

Xaa Leu Ile Phe Phe Leu Leu Ala Leu Gly Ser Xaa Leu Cys Leu Leu
            20                  25                  30

Leu Cys Leu Pro Ser Phe Asn Lys Thr Arg Arg Lys Gln Lys Pro
         35                  40                  45


<210> 524
<211> 43
<212> PRT
<213> Homo sapiens

<400> 524
Ser Ser Lys Thr Pro Leu Pro Ser Glu Arg Arg Trp Ile Ser Gly Ser
 1               5                   10                  15

Ser Leu Met Ala Pro Arg Pro Trp Leu Leu Gly Ile Ala Leu Leu Gly
            20                  25                  30

Leu Trp Ala Leu Glu Pro Ala Leu Gly His Trp
         35                  40


<210> 525
<211> 3
<212> PRT
<213> Homo sapiens

<400> 525
Leu Asn Trp
 1
```

<210> 526
<211> 174
<212> PRT
<213> Homo sapiens

<400> 526
Phe Ala Phe Cys Ala Glu Leu Met Ile Gln Asn Trp Thr Leu Gly Ala
1   5   10   15

Val Asp Ser Gln Met Asp Asp Met Asp Met Asp Leu Asp Lys Glu Phe
                20   25   30

Leu Gln Asp Leu Lys Glu Leu Lys Val Leu Val Ala Asp Lys Asp Leu
            35   40   45

Leu Asp Leu His Lys Ser Leu Val Cys Thr Ala Leu Arg Gly Lys Leu
        50   55   60

Gly Val Phe Ser Glu Met Glu Ala Asn Phe Lys Asn Leu Ser Arg Gly
65   70   75   80

Leu Val Asn Val Ala Ala Lys Leu Thr His Asn Lys Asp Val Arg Asp
                85   90   95

Leu Phe Val Asp Leu Val Glu Lys Phe Val Glu Pro Cys Arg Ser Asp
            100   105   110

His Trp Pro Leu Ser Asp Val Arg Phe Phe Leu Asn Gln Tyr Ser Ala
        115   120   125

Ser Val His Ser Leu Asp Gly Phe Arg His Gln Ala Ser Gly Thr Ala
    130   135   140

Thr Trp Ala Pro Ser Ala Ala Ala Ser Cys Ala Cys Ile Met Thr Glu
145   150   155   160

Val Pro Pro Asn Ala Pro Pro Thr Leu Thr Ile Lys Leu Leu
                165   170

<210> 527
<211> 43
<212> PRT
<213> Homo sapiens

<400> 527
Met Trp Lys Asn Leu Gly Ser Gly Ser Val Phe Val Thr Trp Phe Ser
1   5   10   15

Leu Val Met Ile Leu Ser Gly Ile Gly Pro Leu Gly Asp Ala Glu Asp
                20   25   30

Ser Ile Ser Asp Val Ser His Arg Leu Arg Pro
            35   40

<210> 528
<211> 13

```
<212> PRT
<213> Homo sapiens

<400> 528
Phe Gln Phe Pro Leu Leu Thr Ile Ala Leu Gln Phe Leu
 1               5                  10


<210> 529
<211> 30
<212> PRT
<213> Homo sapiens

<400> 529
Met His Tyr Val Ile Val Leu Ser Leu Phe Val Val Leu Glu Lys Lys
 1               5                  10                  15

Asn Lys Met Gly Ser Asp Gly Cys Leu Arg Lys Asn Gly Ser
            20                  25                  30


<210> 530
<211> 3
<212> PRT
<213> Homo sapiens

<400> 530
Met Lys Thr
 1


<210> 531
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 531
Met Ser Arg Ser Ile Val Leu Arg Gly Ser Leu Phe Leu Phe Phe Ser
 1               5                  10                  15

His Tyr Thr Leu Lys Leu Leu Ser Val Ile Lys Gln Thr Asn Arg Lys
            20                  25                  30

Ile Val Trp Glu Lys Pro Cys Ile Arg Leu Phe Tyr Xaa Val Leu
            35                  40                  45


<210> 532
<211> 26
<212> PRT
<213> Homo sapiens

<400> 532
```

```
Met Pro Leu Pro Val Leu Leu Cys Leu Thr Leu Pro Met Pro Leu Pro
 1               5                  10                  15

Ser Ala Thr Ala Arg Gly Gly Asn Arg Thr
            20                  25
```

<210> 533
<211> 58
<212> PRT
<213> Homo sapiens

<400> 533
```
Ser Ser Ile Pro Val Ser Ile Leu Ile Gly Met Lys Leu Ile Leu Tyr
 1               5                  10                  15

Leu Leu Ile Thr Glu Ser Gly Ser His Glu Lys Lys Ser Phe Tyr Pro
            20                  25                  30

Ser Phe Lys Tyr Met Phe Lys Ile Ile Ile Tyr Val Ser Ala Tyr Cys
        35                  40                  45

Arg Thr Ala Leu Arg Ala Thr Val Ser His
     50                  55
```

<210> 534
<211> 19
<212> PRT
<213> Homo sapiens

<400> 534
```
Asn Arg Thr Leu Leu Phe Leu Ile Leu Phe Val Leu Phe Gly Leu Gly
 1               5                  10                  15

Tyr Gly Phe
```

<210> 535
<211> 40
<212> PRT
<213> Homo sapiens

<400> 535
```
Met Phe Leu Leu Val Leu Ser Val Phe Cys Asp Phe Met Cys Ser Ile
 1               5                  10                  15

Ala Pro Arg Cys His Ala Leu Ser Leu Val Ser Leu Arg Ala Gln His
            20                  25                  30

Leu Ser Leu Phe Ile Thr Cys His
        35                  40
```

<210> 536
<211> 57
<212> PRT